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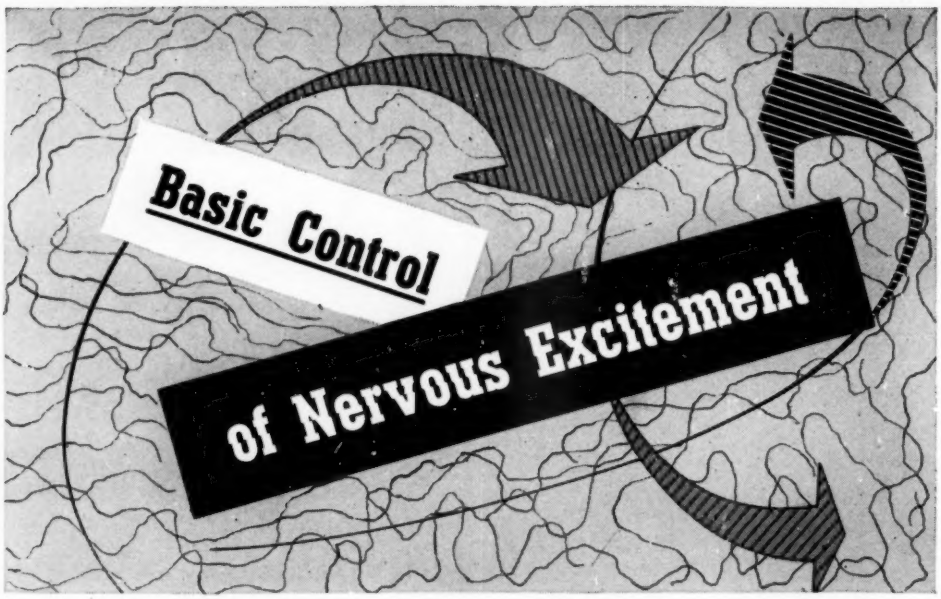

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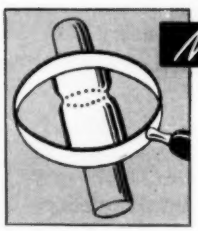

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APPRAISAL OF THE WITNESS[1]

HENRY A. DAVIDSON, M.D., WASHINGTON, D. C.

The psychiatrist has long been recognized as one who can contribute to an understanding of the claimant in a personal injury action, or the understanding of the defendant in a criminal action. Comparatively new is the concept that he can play a major role in the administration of justice by appraising the competency of witnesses.

This has been left largely to the intuition of jurists, with some unofficial help from the experimental psychologist. Many judges pride themselves on their ability to determine by intuition whether a witness is telling the truth. Guttmacher and Weihofen(1) cite Jerome Frank who tells of a "judge who counted as a liar any witness who rubbed his hands while on the stand." Other judges use similar formulas, though they usually do not reveal these secrets. And no one knows on what basis a jury decides whether to believe a witness. There is certainly no pretense that they use any scientific yardstick.

There is a strong emotional component in the motivation and memory of witnesses. It thus represents an area that should fall within the special field of the psychiatrist. To give effective and accurate testimony a witness needs 4 traits. He must observe intelligently; remember clearly; speak coherently; and be free of any emotional drive to distort the truth. The analysis of these 4 should be a job for the psychiatrist.

One reason psychiatrists have paid so little attention to this is that there are legal hurdles between forming an opinion and being allowed to tell the court about it. A witness cannot be compelled to submit to a psychiatric examination. A *party* to a suit may be required to undergo examination if he wants to develop his claim. A claimant in a personal injury action will not get very far with his suit if he refuses to let the insurance company's doctor examine him, because he is a *party* to the action—not just a witness. But suppose the question of which driver was negligent depends on 1 casual bystander who saw the accident. This witness might be a senile psychotic or a confabulatory alcoholic. Nonetheless, he is only a collateral witness, and he cannot be barred from testifying because of his refusal to submit to a psychiatric examination.

In certain criminal cases the complaining witness is, in effect, the prosecutor, not simply a collateral witness. For instance, in a rape charge the complaining witness is really charging the defendant with the crime. Though technically only a witness, she is emotionally as much a party to the action as if she were suing civilly for damages. Yet courts may refuse to allow the defense psychiatrist to examine her because technically she is a witness, not a party. Thoughtful lawyers are aware of this absurdity. For instance, Hoffinger(2)—who is a lawyer not a doctor—recommends that when his testimony is important and the question of his competency is raised, the witness should be required to submit to psychiatric examination. He says:

> [The witness' right of privacy here is] outweighed by the need of getting at the truth. Without benefit of psychiatric assistance, a jury may make the proper evaluation of the abnormal witness' credibility. But . . . good luck alone can make it correct. Psychiatric diagnosis should be admitted whenever it is offered whether based on clinical examination or on court room observation alone.

This last comment opens up an interesting field. It suggests that if the psychiatrist cannot examine the witness personally, he can still contribute by offering a diagnosis based on courtroom observation. In fact, Hoffinger(2) even suggests that "the psychiatrist may d i r e c t cross-examination, thereby approximating a personal interview." This, of course, is a naïve simplification of the nature of a psychiatric interview. But one can sympathize with the plight of the lawyer whose innocent client is being pilloried by a witness whose testimony is rooted

[1] Read at the 109th Annual Meeting of The American Psychiatric Association, Los Angeles, Calif., May 4-8, 1953.

in the fantasies of a psychosis, the memory defects of alcoholism or senility, or the mischievous exhibitionism of a psychopath. Unable to prove the witness' incompetency by personal examination, he will ask the psychiatrist to sit through the testimony of this witness and then to give an expert opinion of the witness' credibility based on the doctor's observation. It may be that the attorney has, through private investigation, assembled enough data to enable the psychiatrist to make a diagnosis, especially when this is combined with courtroom observation. Even so, it is unlikely that the judge would allow him to introduce a string of witnesses for the sole purpose of giving the personal background of this 1 questionable witness. But unless this is done, the psychiatrist has no legal right to use any of that background knowledge in making a diagnosis. One cannot take the stand and swear that a witness is a psychopath or a neurotic on the basis of a medical history if that history is not disclosed to the court.

In some cases, the witness' own behavior and words in the courtroom are sufficient for a diagnosis. Here, however, the psychiatrist appears to be making a diagnosis without having examined the patient. If he testifies that a witness is a manic or a psychopath, for instance, the cross-examiner will ask when he examined the witness. To say he never examined him would discredit the doctor in the eyes of the jury. But if he says that his observation in the court room constituted an adequate examination, the answer would be vulnerable.

Physicians frown on allowing a doctor to sit at counsel's elbow and whisper questions to him. There is no objection to the doctor and lawyer engaging in a private pretrial conference at which the tactics of the trial could be discussed. But for the doctor to sit at the counsel table and conduct the actual inquiry of a questionable witness is considered somehow unseemly. It violates no specific ethical canon; there is nothing specifically meretricious about it; yet operating in this manner invites the criticism of one's colleagues.

All this means that justice may sometimes be at the mercy of an incompetent witness. The side benefitting by his testimony will certainly not impeach the witness. The opposing attorney knows that the testimony is rooted in fantasy, amnesia, or malice, but is helpless to neutralize it because of the legal ground rules. Some day the law may allow a formal psychiatric examination of a key witness whose competency is questioned. Until it does, the only instrument available for calling attention to the witness' incompetency is cross-examination by the opposing attorney.

This has obvious limitations, but the attorney's psychiatric consultant can be of considerable help here. The first limitation is that some of the questions that have to be asked may seem irrelevant. For instance, an elderly witness gives many details about an accident some months ago. It appears to the cross-examining attorney that this witness cannot possibly recall events with such clarity. His psychiatrist has advised that questions like "what did you have for breakfast this morning?" are common ones in testing the memory of senile patients. If he asks that question, it will certainly bring objection from the other lawyer who will argue that the witness' breakfast menu today can have no relationship to an automobile accident last year. Indeed, the query may bring some laughs from the jury. Delusions of marital infidelity are common in senile psychotics, but only the rarest of judges would allow a collateral witness to an automobile accident to be asked if he thinks his wife is faithful to him.

Thus, in impeaching a witness' mental capacity the attorney must map out his questions carefully, and must so arrange them that each is a reasonable foundation for the next. At times, it may even be advisable to announce clearly that the attorney considers the witness incompetent to testify and that he wants to show why. This direct approach is seldom used but its wider use will be necessary if psychiatric knowledge about testimonial capacity is to be put at the disposal of the courts. The only alternative would be a rule permitting a formal psychiatric examination of a questionable witness.

The major clinical conditions affecting testimonial capacity are the psychoses, mental deficiency, drug addiction, alcoholism, personality disorders, certain organic involve-

ments of the brain, and sometimes certain forms of psychoneurosis.

A *schizophrenic* sometimes can report an event with carbon-paper fidelity; but not often. Schizophrenics make unreliable witnesses because they have defective observation, distorted memory processes and, often enough, paranoid ideas. Even if the schizophrenic registered the event faithfully he might have difficulty in reproducing it verbally because of the peculiar way in which he uses speech and word concepts. It would certainly seem unjust to base a verdict on the testimony of a schizophrenic. To be sure, injustice may result from uniformly rejecting such testimony too. But the lesser evil would surely be to refuse a judgment or verdict if it depended largely on the unsupported testimony of an active schizophrenic.

When a *senile psychotic* is an important witness, it seems only fair to call the attorney's attention to the frequency of delusions of infidelity, impairment of memory, and delusions of ingratitude that so often characterize this psychosis. The psychiatric consultant should, in the interests of justice, look for these features if a senile psychotic or any emotionally disturbed senile witness is testifying.

Aphasia is a problem about which psychiatrists show scant interest. However, in the normal course of events a certain number of casual witnesses will have aphasia of varying severity. And the plaintiff in a head injury action may himself be aphasic as a result of the very injury that is the subject of the litigation. He may also be the complaining witness in a criminal action growing out of the assault.

Aphasia, by itself, need not necessarily bar the witness from testifying. Indeed, in one case(3) a court that did say that an aphasic was necessarily incompetent was overruled by a higher court. The higher court took the sensible position that it would be necessary first to show that he was incompetent, and that this could not be automatically assumed from the diagnosis. Indeed, one might go further and say that, in some cases, the aphasic could give truthful yes or no answers to simple questions permitting of such answers while he might be unable to give replies requiring narrative explanation. Obviously what is needed here—and what the witness too seldom gets—is a preliminary psychiatric study to determine the areas in which his communicating functions are reliable and those in which they are not.

A well-preserved, not-too-sick *manic* makes a plausible but misleading witness:

> A frontal attack on the competency of an intelligent hypomanic is doomed to fail. In the short run, he can best the attorney at the question-and-answer game. Skillful advocates find it tactically better to let the witness talk on. Given time enough, he is more likely to expose his psychosis than he is to be trapped into such exposure by a hostile attorney(4).

The hypomanic is a dangerous witness because he says things with such plausible positiveness. But as every psychiatrist knows, the things he says can be of the stuff that dreams are made of. He may mean well, but his testimony is often so embroidered that it can bring about a miscarriage of justice if it is vital to proving a case.

Paranoid patients, if not deteriorated, may sound as if they are talking good sense. Simple exposure of the delusional network may be ineffective in discrediting the witness. If the delusion does not obviously touch on the subject matter of the case, the judge and jury may consider it irrelevant. I once heard a witness testify about the details of a taxicab accident that he happened to see from his window. The witness had an elaborate delusional system about being a supersecret agent of the U. S. Secret Service, but this did not seem to discredit him as a witness. The psychiatrist knows that a delusional system is never watertight and that it reflects a disorganization of thinking that may contaminate all of the patient's thought processes. This kind of explanation the psychiatrist ought to be able to give to the court.

Drug addicts ordinarily make adequate witnesses unless, at the time of the event, the witness is under the acute toxic influence of the drug. However, popular disapproval of addiction is so strong that the attorney who depends on an addict as a witness may be in trouble. In truth, the addict is not a reliable witness if the issue happens to concern his source of supply or if his being witness may result in a cutting-off of that supply.

A *mental defective,* if not unwholesomely motivated, may make an adequate witness,

if the event is one that can be described adequately in a few broad verbal strokes. Indeed, his inability to inject any personal interpretation may make him a jewel. However, most events are complex. They are made up of many subtle details, and here the defective is a poor witness because of his deficient powers of observation and his inability to paint a vivid verbal picture. The alleged suggestibility of the mental defective is, I think, somewhat exaggerated. To be sure, some of them are easily influenced into wording their testimony by pretrial suggestions from the friendly attorney, but we all know of mental defectives who can be infuriatingly stubborn and not in the least open to suggestion.

How to demonstrate that the witness is a mental defective is a ticklish problem in trial tactics. He is not likely to submit to a psychometric test. School, Army, Navy, and industrial records are obvious sources of information about his intelligence quotient. By cross-examination the attorney can sometimes make it clear that the witness simply cannot grasp the meaning of his own testimony. I recall one case in which an insurance adjuster had a mental defective sign a deposition. On the stand he confirmed that he had signed it and stated that everything written there was true. The document included such phrases as "I observed the increasing acceleration of the vehicle" and concluded with a statement that "this deponent says . . . ." It was easy to show on cross-examination that he had not the faintest idea what was meant by words like "acceleration" or "deponent."

How about alcoholics? According to Jellinek(5), about 8% of the population are chronic alcoholics. Presumably alcoholics would appear as witnesses fairly frequently. Apart from obvious situations where the witness is drunk, deteriorated, psychotic, or delirious during the event, this poses a serious problem in testimonial capacity. The nondeteriorated chronic alcoholic makes a plausible witness. Yet the courts should know that he is an unreliable observer, often at the mercy of mixed and unpredictable emotions. The memory defects of the chronic alcoholic are well known to psychiatrists, and should be made known to the courts. It is unusual for an attorney to be allowed to prove that a collateral witness *is* a chronic alcoholic; this is part of the general tactical problem already reviewed. One of the most baffling problems is presented by the syndrome that used to be called "pathological intoxication."[2] In the first place, it is difficult to demonstrate the existence of this syndrome. And even if it is shown, it is impossible to say whether or not testimony represents fabrications during the fugue period. In general, the danger of confabulatory memory artifacts must be pointed out whenever the testimony of a chronic alcoholic assumes importance.

Psychoneurosis does not, of course, disqualify a witness. If it did, our courts might not have much business. But it is necessary to bear in mind that in amnesic and dissociative reactions there may be serious memory gaps; that obsessional states are often accompanied by distorted interpretations of events; and that there may be some blurring at the frontier between reality and fantasy in depressive reactions and in psychasthenic states. These are points worth exploring when the key witness has a definite psychoneurosis.

Less obvious, yet in this text more important, are deep-seated anxieties that cause persons to make false accusations. Orenstein(6) cites cases in which, as he says, "the acting out of unconscious drives causes false accusations, which may result, at times, in convictions of the innocent." Other cases are cited by Borchard(7). It seems appropriate to recall that 20 women were hanged as witches in this country less than 300 years ago on the testimony of a half-dozen hysterical 17th century bobby-soxers. As Starkey (8) says:

> They availed themselves of the opportunity to rebel against restrictions placed on them by society. The girls were having a wonderful time. Their notoriety was rewarding to childish natures beset by infantile cravings for attention.

While witch hunting is no longer fashionable, it is still possible for hysterical witnesses to

[2] In the nomenclature of the *Diagnostic and Statistical Manual of Mental Disorders* (*Washington, D. C., 1952.* American Psychiatric Association) this condition is now listed as a form of "Acute Brain Syndrome, alcohol intoxication." See page 16 of the *Manual.*

trap innocent persons by plausible testimony. The motivation of such testimony is beyond the ken of the unsophisticated juror, who assumes that the stories must be true since the witness has no obvious motive for lying. Here is an untilled area for psychiatric education.

The *psychopath* is one of the most troublesome of all witnesses. For convenience, I am using the familiar if somewhat old-fashioned word "psychopath" to embrace the categories of personality pattern disturbance, sociopathic personality disturbance, and personality trait disturbance, spelled out in our current nomenclature(9). His testimony is often accepted at face value because of confusion about the terminology, because of his plausibility, because of his strange motivation, and because of the difficulty the layman has in grasping the concept of nonpsychotic psychopathy. Since psychiatrists themselves cannot agree as to the meaning of the word "psychopath" or of the phrase "personality disorders," judicial authorities are reluctant to adopt any rule about the competency of psychopaths.

If the witness has made a success of any segment of his life, it is hard for the psychiatrist to insist that he is a psychopath. We know that transitory success is not inconsistent with a deep-seated personality disorder, but the courtroom affords no opportunity for giving a lecture on the subject.

Motivation is the real root of the trouble here. A juror can understand that a witness would tell a lie when he has something personally at stake. What the average juror cannot understand, however, is that a witness might spin a falsehood even if he has nothing obvious to gain. Indeed, sometimes the witness degrades himself by his own testimony. In that case the juryman assumes that no man would manufacture a story to incriminate himself. Therefore the story must be true. We know that the psychopath may use the witness stand as a vehicle for expressing hostility and aggression, and we know that a masochistic component often makes him willing to wreak mischief at the cost of degrading himself. Hoffinger(2) suggests that: "The psychiatrist can separate the pathological liar from the normal (protective) liar by correlating the psychopath's behavior into a diagnostic life pattern." Some procedural changes are needed to enable us to carry out this duty, however.

Here it seems best to introduce a word of warning. We psychiatrists frequently use the label "psychopath" in a punitive sense. We all know that there is only a vague frontier between psychopathy and certain neurotic reactions; and at the other end of the spectrum, between psychopathy and certain types of psychotic behavior. In fact, there are psychiatrists(10) who contend that psychopathy is simply an acted out psychoneurosis; and others who believe that most psychopaths are really psychotic(11). In view of this disagreement, the decision to affix the label "psychopath" is often subjective with the examiner. If the patient annoys him, if he doesn't like the patient, he may punish him by calling him a psychopath. Psychiatrists are not immune to these human failings. In practice, a psychiatrist does not dare affix this stigmatic label on a witness in open court unless he can marshal an array of incidents reflecting antisocial behavior. Yet the act of reciting those incidents implies moral judgments: It means that the psychiatrist, in effect is saying, this witiness did *X*, which is evil, and he did *Y* which is evil, and he did *Z*, which is evil, therefore he is a psychopath. But, as Roche(12) puts it: "An opinion based on an array of value judgments cannot be other than a value judgment itself, packaged and returned in a more sophisticated form." The juror and jurist can sense, behind the expert's recital, the name-calling implicit in the psychopath label and the listing of examples of evil behavior. This situation can be a trap for the psychiatrist.

Are there any mechanical devices that can help us probe the witness' motivation and capacity for truth telling? Or must we rely on general clinical judgment? I do not think there is any scope for use of barbiturates or scopolamine here. Apart from the legal impossibility of compelling a witness to take the drug, there is the medical fact that these drugs are better for the release of unconsciously repressed material than for the release of material which is consciously suppressed. Lie detectors represent another mechanical method that has already built an impressive record of accuracy(13, 14, 15).

However, there is no legal way of compelling a party, much less a witness, to submit to this apparatus. Conceivably, as the instrument is perfected, it might win judicial approval. Wigmore(16) assures us that "If there is ever derived a psychological test for the evaluation of witnesses, the law will run to meet it. . . . Whenever the psychologist is really ready for the courts, the courts are ready for him."

The law is not blind to the question of motivation. This, indeed, is the basic reason for the old legal requirement that a witness could not testify unless he believed that God would punish him for false swearing. In many states, atheists could not testify simply because the law could see no reason why an atheist should keep his oath to tell the truth. "If he doesn't believe in God, he would have no fear of telling a lie, therefore his oath is not worth anything." In many states this concept has been replaced with an apparently more sophisticated one, namely, that the motive for telling the truth is fear of conviction for perjury. Hence, your income tax return closes with this phrase "I declare under the penalties of perjury that this return is a true, correct and complete one." You will note that the Internal Revenue Bureau does not trust your fear of hell as a motivation. It prefers to motivate you with a fear of prison for perjury.

Neither law nor religion seems to have fashioned any instrument for measuring either a witness' capacity or his willingness to tell the truth. But this is the field wherein we psychiatrists lay claim to special expertness: the measurement of mental capacities and the appraisal of human motives. Here then is a relatively new and genuinely important challenge to all of us.

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THE JAW AS AN ORGAN OF AGGRESSION; WEAKNESS OF THE JAW IN CATAPLEXY

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Weakness of the jaw occurs in cataplexy and allied states, and this paper proposes to consider why.

The role of aggression and guilt in cataplexy is a striking one(4). The classic example is the angry father who raises his hand to punish his child and is at that moment stricken with weakness of the upraised arm. The weakness may spread to other limbs as well. This event must be viewed from 2 standpoints—the psychological and the physiological.

Psychologically, the father is torn by a conflict; his aggressive impulse toward his child makes him feel guilty. Physiologically, he is the victim of what Pavlov called conditioned inhibition.

Conditioned Inhibition.—An animal trained to respond to a stimulus may be further trained *not* to respond when that stimulus is joined to another. Thus a dog may be taught to expect meat after the sound of a bell but not when the bell is combined with a flash of light. Suppression of salivation in the second instance is due to conditioned inhibition. This variety of inhibition is important in adaptation for a response that is perfect in one situation may be useless and even dangerous if the situation has been modified by an added factor. Thus a dog may safely go after a small animal, but not if it has quills. Likewise a man may run from danger, but not if he is a soldier at the front.

Guilt is a modifying factor in the expression of an aggressive impulse, and the cataplexy that supervenes when a man raises his hand against his child is a manifestation of inhibition resulting from his conflict. The ancient parental admonition, "This hurts me more than it does you," is not at all fantastic, the skepticism of small boys notwithstanding. This proposition is strengthened by the fact that cataplexy may be absent when guilt is lacking, as in the case of a narcoleptic reported by Daniels(2) who had no trouble at all when he attacked a man who was making fun of his malady. There is no let or hindrance in punishing someone so heartless as to poke fun at a sick man.

The aggression that evokes cataplexy may be of any degree. It may be naked and explicit, as when a man strikes his child or gets into a fist fight with another man. It may be implicit, as in Murphy's Case 7(5). This unhappily married woman was riding in an elevator and, looking over the shoulder of someone who was reading a newspaper, she saw an item about a man who had been stabbed to death by his wife. "The thought that she might do this entered her mind," whereupon she collapsed in cataplexy. Then there are cases where aggression is plain enough but permissible, as when a man is hunting or fishing. Finally there are cases of sport where aggression is symbolic, as when one is about to tag a runner in baseball, or demolish an opponent with a smashing volley in tennis. Here the player is "acting out" an aggressive impulse, and the resulting guilt, though only unconscious, may evoke cataplexy.

Aggression, of course, is not the sole precipitant of cataplexy, nor even the commonest. The commonest is laughter. But statistics don't tell the whole story. The importance of aggression is revealed by the cases in which this factor served to elicit the *first* attack. Any circumstance that elicits a seizure is important, but it is doubly so when it elicits the first. A good example is Case 1 of Wenderowic(6). The patient, a narcoleptic farmer, 4 months after the onset of his sleep attacks, had his first cataplexy when he was about to whip his cow. A week later he had his second when he wanted to whip his horse. Next day he had his third while arguing with his brother. Here is a man who had cataplexy on pleasant as well as unpleasant emotion, but his first three attacks were evoked by hostile impulses.

THE JAW IN CATAPLEXY

Cataplexy, when severe, will affect the whole body, the patient falls to the ground

unable to move. A lesser attack will affect one or more parts of the body. The object of this paper is to draw attention to the prominence of the jaw in some cases. Patients may report that the attack seems to begin in the jaw. Thus in Drake's Case 2(3), the patient described his attacks in these words: "First my jaw opens wide and then my legs get weak and then, bam, I drop to the ground in a heap." In Bostock's Case 2(1), the patient thought he "could control [the attacks] by holding his jaw."

Now cataplexy, when it is not general, is prone to attack first and foremost the limb that is serving as the instrument of aggression. The arm that is about to strike the child or fire the volley in tennis may be the first or even the only limb to suffer. Therefore the striking involvement of the jaw would suggest that it too is an organ of aggression. This is understandable in the light of the behavior of the infant. The very first aggression is oral, for the infant can bite before he can scratch or strike. The jaw is the primal weapon.

The Jaw in Neurotic States

Jaw disturbances may also occur in people who do not have narcolepsy or cataplexy. Neurotic uneasiness and tremulousness may affect the jaw, as in the following case.

A neurotic automobile mechanic, who was 37 when seen in 1952, first noticed his jaw trouble at Omaha Beach, where he was serving on a landing craft tank. His captain, seeing that he was nervous, wanted to take him to the doctor, but the patient demurred, saying he would soon be all right. The captain, however, insisted, "You're very nervous, and what's more, you're not speaking clearly; the boys can't understand you over the phone."

Since then the patient has found that on strong emotion his jaw bothers him. "The first thing I feel is that right here [lower lip] it starts to freeze, and then I sort of get that thickness of the tongue: I can't seem to pronounce my words. My jaw seems to droop." These are visible, for people will ask, "Is something wrong with your mouth? Can't you pronounce your words?" Once, when he was having beer with some friends and they were all joking, he had an attack that prompted his friends to exclaim, "Jesus Christ, has the beer hit you already? Does your mouth stay open like that when you drink beer?" When he tried to say he wasn't drunk they shouted him down, "You must be drunk; you can't pronounce your words."

Both pleasant and unpleasant emotion may evoke an attack. It often comes on at a party, where everybody is laughing and joking. Once, when bowling, his friends were admiring his score. He had told them he was not a good bowler, and now they were teasing him, "What's the big idea, pulling our legs, telling us you can't bowl," and this brought on an attack. As an example of unpleasant emotion, he had an attack at work when he and his boss disagreed on how a job should be done and he felt like telling him to go to hell.

When he has an attack, he goes off by himself and tries to calm down, and the attack usually dissipates itself after a half-hour.

He has never spanked his children, but once he had an attack when he watched his wife spank their 8-year-old son. The punishment was justified, but after a minute he felt "enough is enough" and that's when the attack started.

He has never had undue somnolence or sleep paralysis. There is no sex problem and the symptom is not related to coitus.

I managed to provoke an attack by talking to him sharply and getting him flustered. His jaw started to quiver and drooped moderately. Speech was affected, sounding like that of a man with ill-fitting dentures.

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REVIEW OF PSYCHIATRIC PROGRESS 1953

HEREDITY AND EUGENICS

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Notwithstanding the likelihood of a slight wishful component in the widely expressed belief (1, 2, 3, 4) that "this is the century of the biological sciences," the over-all 1953 balance sheet of production in medical (psychiatric) and population genetics was impressive and indicative of progress on a broad front. Partly under the impetus of a growing recognition of the potentialities of twin studies, professional interest in the problems of inheritance in man appeared to rise everywhere, at least on this side of the Iron Curtain and particularly in medical specialty groups. Equally encouraging in this general forward movement was the emphasis placed by workers in the biological sciences upon their increasingly important share in social responsibilities and public health planning (5, 6, 7) as well as the stress laid in an official statement of Pope Pius XII upon the need for systematic and ideologically unshackled research in human genetics (*L'Osservatore Romano,* September 9, 1953).

The policy-setting papal address was delivered as part of the inauguration ceremonies at the opening of the new Gregor Mendel Institute for twin research at the University of Rome and referred to modern genetic approaches to an adequate understanding of man's behavior as ". . . perhaps the most dynamic research" of our time. There was almost general agreement that the explicitness of this address will be helpful in dispelling not only the demoralizing threat of the current brand of Lysenkoism (that scientific thinking should conform to political thinking), but also the false although still widespread notion that a basic conflict exists between religious tenets and the scientific principles of human genetics as applied to medicine in general and to psychiatry in particular.

Specified accounts of recent advances in psychiatric genetics were presented by Penrose, Sjögren, and Shields at the Ninth International Congress of Genetics in Bellagio (August 24-31); by Franceschetti, Gedda, Von Verschuer, the reviewer, and others at the First International Symposium of Medical Genetics in Rome (September 6-7); by Cobb (8) and Mayer (9) in well-organized reviews; and by different teams of experts in a series of symposia in this country, including those arranged by the National Institutes of Health in Bethesda (Problems and Methods in Human Genetics, October 8-9), by the Association for Research in Nervous and Mental Disease in New York City (Genetics and the Inheritance of Integrated Neurological and Psychiatric Patterns, December 11-12), and by the A.A.A.S. in Boston (Human Genetics and Medical Education, Genetic Factors Affecting Intelligence, Genetics and the Races of Man, December 28-30). Proceedings of these 5 meetings are now in press.

The growing interest in comparative twin studies was documented not only by the publication of 2 new monographs on twins, one by Burlingham (10) and the other by Slater (11), but also by 2 other books dealing with the genetic problems of health and disease on the basis of twin data, one by Lamy (12) and the other by the reviewer (13). Burlingham's report was confined to certain psychodynamic phenomena in the early histories of 3 twin pairs, classified as monozygotic and observed in a residential nursery under wartime conditions. Slater's monograph, bearing the earmarks of a competent research worker with experience in both clinical psychiatry and demographic investigations, combines a critical analysis of procedural technicalities in the use of the twin-study method (including the problems of dermatoglyphic zygocity determination) with a presentation of detailed twin data on a series of 297 schizophrenic, manic-depressive, and psychoneurotic sets, by and large confirming the current genetic theories of the given disorders

(13). Other valuable twin data (14-26) were reported by Aschner *et al.* (Morgagni's syndrome and adenomatous goiter in schizophrenic one-egg twins); Bowen (allergy in twins); Hoppe (dissimilar brain tumors in concordant one-egg pair); Stobbe and Taeschner (lymphatic leukemia concordance in a second pair of one-egg twins); Dalla Volta Zecca (twin incest); Blandford and Garcia (successful skin graft in one-egg twins); Thums (non-genetic theory of multiple sclerosis despite observed concordance in one-egg pair); Zazzo (lower intelligence in twins than in comparable non-twin population because of social isolation); and by Dahlberg, Karn, Matsunaga, Stocks, and Strandskov and Askin in relation to various aspects of the phenomenon of twinning.

Further corroborative evidence for the inheritance of specific gene-controlled dysfunctions at the roots of the 2 major types of psychosis, schizophrenia and manic-depressive psychosis, was supplied by Elsässer's study of 134 sibships with 2 psychotic parents (27) and by Stenstedt's report on the distribution of manic-depressive psychosis in the families of 216 cyclic index cases (28). In the former sample, the psychoses ascertained in the offspring of 2 psychotic mates were seen to follow strictly the pattern set by the parents, and to recur at a rate far above the expectancy of persons with only one schizophrenic or manic-depressive parent. In the latter survey, the expectancy of manic-depressive psychosis (autosomal dominant with irregular expression) observed in the parents, siblings, and children of the index cases approximated 15% while their morbidity risk for psychoses other than manic-depressive was not found to be increased. The reviewer's finding of a lowered marriage rate of manic-depressives—in the absence of a social decline of their families—was also confirmed.

Cognizant of the need of harmonizing psychodynamic, sociodynamic, and physiodynamic (genetic-organismic) views of human behavior patterns within a unified conceptual scheme, and bravely aware of the scientific and terminological fusibility of the various theories, Rado (29) pioneered in linking psychoanalytic and genetic concepts of schizophrenia. In line with his adaptational theory of disordered behavior, he traced the basic inadequacy in the psychodynamics of schizophrenics to an "integrative pleasure deficiency" in their proprioceptively disordered phenotype (schizotype) which may be in a compensated (schizoid) or decompensated (pseudoneurotic) stage of schizo-adaptation or reveal schizotypal disintegration marked by adaptive incompetence (progressive psychosis). The physiodynamic substrate of this generalized "emergency dyscontrol" was shown by Braceland (30), in an excellent review of known hormonal influences on emotional phenomena, to be still obscure.

Notable contributions to the genetic understanding of selective population trends were made by Darlington (31) who provided evidence for the tendency of human beings to assort themselves genetically into the types of environment they prefer; by Glass and Li (32) in a study of the dynamics of racial intermixture; by Haskell (33) in a genealogical analysis of neurotic family patterns; by Juda (34) in a posthumous report on the personality characteristics observed in the descendants of 113 artists and 181 scientists; and by Hablützel (35) in an investigation of an isolated Swiss community with a very high prevalence of intellectual deficiencies. A new textbook of genetics was published by Hovanitz (36), and important methodological and statistical problems of population genetics were discussed by Cattell (37), Cotterman (38), Kalmus (39), and several contributors to a volume on hybrid vigor edited by Gowen (40). The most recent additions to the outstanding Scandinavian series of medicogenetic monographs were contributed by Helweg-Larsen (41), Dössing (42), and Schwartz (43) and dealt with the effect of nuclear classes on organic growth, the differentiation of normal and pathological weight variations in school children, and the genetic aspects of bronchial asthma, respectively. The theory of a specific genotype for asthma (apparently autosomal dominant with 40% penetrance and somehow interrelated with the genetic background factors for vasomotor rhinitis, prurigo, and hay fever) was derived by Schwartz from a study of 441 index and control families and was at least partly confirmed by the animal experiments of Ratner (44) and Chase (45), but was questioned by Ratner and Silberman (46) on methodological grounds.

Of the extensive list of clinical case reports on relatively rare syndromes with a tendency to familial occurrence, those of Arndt(47) and Fattovich(48) on Alzheimer's disease (2 brothers and 5 sisters, respectively), of Pintus and Sarteschi(49) on Parkinson's disease (8 affected and 9 normal sibs), of Sullivan *et al.* (50 on 5 sibs affected by Wilson's disease (including 1 pair of twins), and of Jacobsen and Macklin(51) on hereditary sexual precocity (one family with 27 affected males) appeared to be of particular genetic interest. Leese *et al.* (52), Best and Münch (53) and Mitsuda *et al.* (54) reported pedigrees in relation to Huntington's chorea, Laurence-Moon-Biedl's syndrome, and a recessive sex-linked type of hereditary deaf-mutism. A familial case of Albers-Schönberg's disease (osteopetrosis) was placed on record by Plotz and Chakales (55). Sohval and Soffer(56) described what they assumed to be a new gene-controlled syndrome, characterized by a moderate degree of androgen deficiency, small testes, aspermatogenesis, gynecomastia and increased urinary gonadotropins; and Rayner's(57) observation of vacuolized lymphocytes in phenotypically normal relatives of several cases of juvenile amaurotic idiocy raised the hope of having opened a new avenue to the detection of heterozygotes. Expertly organized treatises on the genetic aspects of microcephaly and Sturge-Weber's disease were presented by Böök *et al.*(58), and Koch (59), respectively.

The most important events in the field of eugenics were the Third International Conference on Planned Parenthood in Bombay, the First World Congress on Fertility and Sterility in New York City, and the establishment of the Population Council under the trusteeship of such prominent men as Frank G. Boudreau, Detlev W. Bronk, Frederick Osborn, John D. Rockefeller III, and Lewis L. Strauss. The program of the fertility-sterility congress was focused on the medical problems of reproduction, but included numerous papers of immediate eugenic interest such as those of Cook(60) and Stone(61). The new population group was formed to encourage research and education in the field of world population and its relation to material and cultural resources. Pertinent books and pamphlets were published by Blacker(62), Darwin(63), Huxley(64), and the American Eugenics Society (Freedom of Choice for Parenthood). The present state of affairs regarding legalized eugenic procedures in different countries was reviewed by Gamble (65), while the reviewer(13) emphasized the need of differentiating between specialized guidance activities applied for the improvement of general health conditions through the utilization of genetic principles (eugenic measures) from those advisory and preventive activities considered primarily for the personal welfare of distressed individuals (medicogenetic measures).

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NEUROPATHOLOGY, ENDOCRINOLOGY, AND BIOCHEMISTRY

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There is some tendency toward a healthy re-evaluation of general concepts in neurology and a trend toward a more precise use of words. This is exemplified in a stimulating article by Meyers(1) on the extrapyramidal system. For example, he states that clinicopathological data are at present insufficient to warrant the belief that for each clinical variety of hyperkinesia, a particular structure will regularly be found to be damaged. A greater emphasis on treatment should also be noted. A special article on therapy appears each month in *Neurology*.

Unusual interest in involuntary movements is evident. Bergman *et al.*(2) suggest that they may be classified according to their ease of control by barbiturates. Cooper (3) found that ligation of the anterior choroidal artery tended to abolish involuntary movements of the opposite extremities. The globus pallidus is supplied by this artery. Walker(4) found that bilateral lesions of the globus pallidus diminished abnormal movements in Huntington's chorea. They also stated(6) that section of the ansa lenticularis abolished the tremor of paralysis agitans in the opposite extremities. Ward and Jenkner(7) evoked tremor of the opposite extremities on stimulation of the medial brain stem reticular substance.

CEREBRAL CORTEX

Earle *et al.*(8) discussed the etiology of temporal lobe foci in epilepsy. They postulated that temporal lobe herniation may occur at birth, producing permanent scars. The anterior choroidal artery is comparatively

large at birth and subject to compression. The effect of prolonged labor and asphyxia on infants who survived was studied by Keith *et al.*(9). Levinson and Goldberg(10) examined 150 mentally retarded children, considering etiological factors, diagnosis, and treatment.

A number of articles published this year dealt with complex mental disturbances related to localized injury of areas of higher integration. McFie and Piercy(11) found that impairment of retention and learning is a function of size rather than position of cerebral lesions while other intellectual functions are selectively impaired by lesions in different locations. Denny-Brown *et al.*(12) discussed the significance of perceptual rivalry resulting from parietal lobe lesions. In another journal the symptoms resulting from bilateral lesions of the anterior cingulate gyrus were described by Barris and Schuman(13). Klüver(14) has found that bilateral lesions of the rhinencephalon in monkeys produce marked behavior disturbances. Brickner(15) reported the pathologic findings in a man who had partial bilateral frontal lobectomy for removal of tumor in 1930. Freeman(16) found that 171 patients out of 1,000, followed an average of 5 years after prefrontal lobectomy and 2 years after transorbital lobectomy, had convulsive seizures. Fink *et al.*(17) observed that intravenous sodium amytal could be used to demonstrate organic defects in cerebration not previously apparent. According to Silverstein(18) cerebral fat embolism may result from shock therapy and offers a logical explanation for the frequent memory defect.

Temmes and Huhmar(19) studied brain wave changes and symptoms in boxers. Freedman *et al.*(20) reported a case of infectious mononucleosis with signs of encephalitis and an abnormal electroencephalogram. May and Ebaugh(21) cautioned concerning the use of hypnotics in senile patients. Cooper(22) found marked retention of sodium and chloride in the blood plasma with lesions involving the frontal lobes or the hypothalamus. Browne *et al.*(23) reported that neurogenic and renal hypertension in dogs was not altered by removal of portions of the cerebral cortex. Uchimura and Shiraki(24) described brain changes in 37 victims of the atomic bomb. In some cases the lesions were related to circulatory changes and in others there was more selective damage of nerve cells. In a case of encephalopathy due to trichinosis, Foley(24) found multiple small hemorrhages in the white matter of the brain. Helfand *et al.*(26) found that trichinosis may simulate a number of other diseases.

BLOOD VESSELS

There are suggestions that intracranial aneurysms are related primarily to degenerative rather than embryonic defects. Walker and Allegre(27) found atheromatous plaques adjacent to these aneurysms with typical changes in the elastic layer of the artery. Hicks(28) found that 47% of patients with intracranial aneurysms had hypertension and 69% showed cardiac hypertrophy. Hyland and Barnett(29) found involvement of the nerves to the extraocular muscles in 39 out of 94 cases of cerebral aneurysms. Sunderland and Bradley(30) described the anatomical relationships of the oculomotor nerve to explain its frequent damage by hemorrhage. Ecker and Riemenschneider(31) presented arteriographic evidence of spasm of the cerebral vessels in vascular disorders. Ethelberg and Jensen(32) reported transient attacks of blurred vision related to increased intracranial pressure interfering with circulation in the posterior cerebral arteries. Berlin(33) studied the records of patients developing grand mal seizures after the age of 35. Hypertension, severe head injuries, and alcoholism contributed to the development of seizures in 32.5%. Friedman(34) found that migraine headaches often have their onset in childhood.

MULTIPLE SCLEROSIS

Roizin *et al.*(35) suggested that sludged blood might be one of the pathogenic factors underlying the fleeting symptoms of multiple sclerosis. Swank and Cullen(36) observed changes in the circulation in the cheek pouch of the hamster following meals rich in fat. Brickner(37) suggested the use of vasodilating drugs to manage acute episodes of multiple sclerosis. Roboz *et al.*(38) developed a micromethod for the quantitative determina-

tion of gamma globulin in cerebrospinal fluid. In multiple sclerosis the gamma globulin is significantly increased.

THALAMUS AND CEREBELLUM

Schreiner *et al.*(39) demonstrated that destruction of the thalamic mediodorsal nuclei in cats led to increased irritability. Conversely destruction of the thalamic anterior nuclei produced an elevated threshold to rage. Combined injury of these nuclei produced labile emotional responses. A nonspecific thalamocortical projection system arises from the intralaminar and related nuclei of the thalamus(40). These fibers coordinate responsiveness and timing of events in different areas of the cortex. Freedman and Schenthal(41) described a cerebellar syndrome having its onset abruptly after hyperpyrexia. The Purkinje cells were destroyed. Luhan and Pollack(42) reported 6 cases of occlusion of the superior cerebellar artery.

SPINAL CORD

Winkelman *et al.*(43) believe that many cases of spinal arachnoiditis may be related to technical errors at the time of spinal anesthesia or angiography. Charnley(44) stated that the nucleus pulposus has hydrophilic properties and may collect fluid under pressure rendering protrusion more likely. Tarlov(45) stated that cysts on the sacral nerve roots are relatively common and may produce sciatic pain. Schreiber and Haddad(46) described these cysts as fluid swellings within the nerve, compressing the root as it emerges from the dura.

Barrows and Hunter(47) found that spectroscopic analysis of xanthrochromic cerebrospinal fluid to identify the 4 pigments commonly present may be an aid in diagnosis. Stein and Fink(48) found no marked pleocytosis or increase in protein content of the spinal fluid after angiography.

NERVES

Kantarjian and DeJong(49) described 3 members of a family showing peripheral neuropathy related to generalized amyloidosis. Similarly, in Portugal, Andrade(50) studied 74 cases of familial generalized amyloidosis with special involvement of the peripheral nerves. Bigelow and Graves(51) discussed impairment of peripheral nerve function as a complication of hemorrhagic diseases. Bonynge and Von Hagen(52) reported severe optic neuritis in a patient with infectious mononucleosis. Brown(53) postulated that an allergic response of the nerve cell to a foreign substance is involved in both the neuritis due to diphtheria and other cases of unknown cause.

MUSCLES

Matthews and Burne(54) found that dermatomyositis may produce a variety of syndromes of muscular dysfunction and must be considered in differential diagnosis. Buchthal and Penilli(55) found that the muscle potentials in cases of polymyositis showed a significant decrease. Arief and Kirschbaum (56) found characteristic electrical changes in the muscles of patients with myotonic dystrophy in contrast to progressive muscular dystrophy. Kirschbaum(57) made histological studies of muscular tissue in neuromuscular diseases. The extent of the reactive properties of muscle tissue is considerable. Blahd *et al.*(58) found a marked diminution in exchangeable potassium values in muscular dystrophy and myotonia atrophica using radioactive potassium as an index. Yoss (59) showed that impulses set up by painful stimulation of tendons ascend in the lateral spinothalamic tracts.

CELLS

Several fundamental studies of cells have appeared. Pomerat(60) made cultures from brain biopsy specimens. Nerve cells migrate from explants of adult brain. Glial elements exhibit rhythmic pulsatile activity which may facilitate fluid movement. Crain *et al.*(61) obtained action potentials from cultures of ganglion cells. Flexner(62) found that maturation of nerve cells is accompanied by the development of enzymes. With the electron microscope Borysko and Bang(63) observed the complex structure of nucleoli. Adamstone and Taylor(64) concluded that the Golgi apparatus is a silver deposit on the reticulum and mitochondria of nerve cells.

Brody and Bain (65) showed that mitochondria play an important part in oxidative and phosphorlative processes. Harmon(66) has separated mitochondria into pure suspension.

ENDOCRINE

Loumos(67) suggested that the autonomic nervous system is the regulator of immunity and resistance. Reiss(68) pointed out that a normal equilibrium in the function of ductless glands is essential for normal mentation. Mirsky(69) discussed the mechanisms whereby psychic conflict and affective reactions may influence the regulation of endocrine function. Richardson *et al.*(70) described 6 cases of cerebral disease due to functioning islet cell tumors. Rowland(71) found that 7 of 27 patients with myasthenia gravis who came to autopsy had thymomas and 5 had hyperplastic thyroid glands. Schwab and Leland(72) felt that thymectomy for myasthenia gravis is of proven value in females under the age of 30. Hoefer *et al.*(73) summarized modern treatment of myasthenia gravis. Wise and Hart(74) described 2 cases of idiopathic hypoparathyroidism. Pool *et al.*(75) demonstrated that alterations in serum sodium, potassium, and chloride frequently occur in the postoperative period following pituitary surgery.

Altschule(76) found that the adrenal cortex is hyperactive in many psychotic patients. Hoagland(77) stated that schizophrenic patients may be deficient in their production of steroids regulating the retention of sodium. With coworkers he(78) also demonstrated that these patients at rest showed a significantly higher rate of excretion of urinary water, 17-ketosteroids, sodium and potassium than normal subjects. Goodman and Kanter (79) found a definite pattern of changes in blood cholesterol level in schizophrenic patients during a course of insulin therapy. Kitay and Altschule(80) found the blood ketone body level elevated in 40% of psychotic patients. They observed acceleration of clotting time in untreated psychotic patients. According to Kral and Lehmann(81) the mean value for the iron content of the spinal fluid is elevated in patients with organic psychoses.

CHEMISTRY

Bachs and Walker(82) postulated that degeneration and removal of myelin is the primary change in the cerebral hemispheres when compression of brain tissue occurs as the result of internal hydrocephalus. Rubino and Balbi(83) believe that magnesium plays a fundamental role in regulating sleep rhythms. Odessky and Rosenblatt(84) conclude that an increased level of inorganic phosphorus in the spinal fluid is pathognomonic of virus infection of the nervous system. In cases of hepatolenticalar degeneration there is an excess of copper in the liver and brain(85). Administration of BAL produces a marked increase in urinary copper. Bakay(86) found a larger deposit of phosphorus 32 in the pituitary gland and hypothalamus than in the remainder of the brain. Einarson(87) demonstrated deposits of fluorescent acid-fast products in the nervous system and skeletal muscles of adult rats long kept on a vitamin E deficient diet.

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ELECTROENCEPHALOGRAPHY

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Three meetings highlighted the past year: the International Congress of Electroencephalography, the International Physiological Congress, and the meeting of the International League Against Epilepsy. In view of these outstanding events, only published papers presented at these meetings will be reviewed.

TECHNIQUES AND PROCEDURES

An amplifier in which EEG signals modulate considerably higher frequency and actuate the recording pen after rectification was presented(42)—advantages: the recording of DC potentials and the avoidance of artifacts resulting from stimulation. Modification of the conventional analyzer write-out trace(21), new flexible cortical electrodes (50), and a moving-picture camera simultaneously photographing EEG tracings(64) were described.

Artificially induced fever(57), novocainization of the carotid sinus(59), pentylenetrazol(66), and bulbocapnine(5) were suggested for activation of EEG abnormalities. Topically applied acethylcholine may reveal cortical epileptogenic foci(16, 60).

The usefulness of metrazol activation was reaffirmed, among "normal" subjects, individuals with suggestive neurological history show a higher percentage of induced paroxysms than does the total population. Photic activation is less effective(12). Photic-metrazol activation was helpful in military practice(43).

BASIC RESEARCH

DIRECT CURRENTS

There has been a revival of DC potential studies. Steady potentials, whether or not associated with spreading depression(14, 36, 44, 45), were correlated with slowly spreading convulsive patterns in the neocortex and the hippocampus. In the latter, initial and delayed after-discharges are superimposed on a wave of long duration, "clonic phenomena" being associated with the oscillations of the DC field(44, 45). Existence of causal relationship between steady and phasic activities induced in the isolated cortex was suggested (13).

The following studies of the applied steady potentials upon neuronic tissue stress the significance of the above-mentioned findings. Unit activities of the cerebellar cortex may be modified by appropriately oriented DC fields(10). Polarized anterior lobe of the cerebellum influences decerebrate rigidity and spike discharges in the reticular formation(54). Clicks applied during a subthreshold polarization of the motor cortex elicit movements corresponding to the polarized area. The clicks remain effective several minutes after the suspension of the polarization (62).

MICROELECTROGRAPHY

Microelectrography reveals relationships between "microspikes" and slower potentials. In the visual system(18), bundles of spikes are superimposed upon retinal *b* waves, designing different patterns for different chromic stimulation. Unit discharges were also recorded from the geniculates and the cortex. Microwaves of 650-1000/sec., superimposed upon the components of strychnine spikes, were described(53) as was a relationship between positive microspikes and slow variations of potential inside the pyramidal cells (28).

Hippocampal seizure patterns consist of the following: (1) steady potentials of about 1 minute duration; (2) superimposed pulses of 1 to 3 per second; (3) 10- to 30-per-second waves on top of these pulses; (4) 100- to 300-per-second spikes on top of these waves; and probably (5) unit microwaves (44, 45). Morphological stratification of these "functional architectonics" is unknown.

ACTIVATING SYSTEMS

Stimulation of certain cortical areas evokes potentials in the reticular formation which was previously shown to "arouse" the cortex. These cortical areas, potentiated by sensory stimulation, may therefore participate in the maintenance of attention and wakefulness through a reverberating pathway going

through the reticular formation(46). Caution was sounded in regard to the psychophysiological significance of the "activating" diencephalic systems. After reaching a plateau in speed of learned behavior(modified Skinner box), introduction of subthreshold diencephalic stimulation *decreases* performance(39). Other structures were included in the diffuse activating system. "Recruiting responses" could be elicited from the caudate nucleus: although not sufficiently widespread, the driving and desynchronizing effects in the diffuse thalamic nuclei and corresponding areas of the cortex could be observed (cortical effects presumably through the thalamic pathways)(49, 74). The amygdala was also added to this system(27).

The ease in eliciting widespread cortical and diencephalic responses from the diffuse thalamic nuclei may misleadingly suggest that these nuclei have the lowest threshold for induced generalized epileptic activity. A series of papers(2, 22, 44, 45) show that widespread *afterdischarges* are most easily produced by hippocampal stimulation, the intralaminar nuclei of the thalamus having a relatively high threshold for afterdischarges.

Injection of penicillin in the medial temporal lobe results in recurrent convulsive (psychomotor) manifestations in monkeys (75).

Stimulation of the cerebellum can stop convulsive effects of electroshock(67).

DRUGS

Intraventricular acelylcholine, carbachol, and eserine increase and regularize 25-45-per-second activity recorded in the periventricular diencephalic structures and produce "recruitment" in the thalamic nuclear masses, imitating the effects of a chronic lesion made between the red nucleus and the mammilary bodies. Cholinesterase(19) reverses the effects of the acelylcholine. Atropine enhances the effects of the lesions.

Atropine may induce large, slow waves resembling a sleep pattern which is not associated with behavior changes: Amphetamine and d-lysergic acid diethylamide produce behaviorally correlated arousal responses (potentiation of the reticular formation)(9). The synergic effects of myanesine and pentothal are explained by similar affinity of both drugs for plurisynaptic systems(63). While nembutal, ether, dormison, tridione, and procaine have little influence upon the classical sensory ascending pathways, they abolish sensory responses in the reticular formations. Strychnine and metrazol stimulate this system(3); EEG studies show that a controlled steady rate of barbiturate injection may insure nearly constant anesthesia for several hours(30).

The minimal convulsive dose of aminophenazone elicits paroxysmal activity and generalized seizures in dogs; it becomes ineffective after bilateral removal of the motor cortex(47). Preliminary administration of theophyllin (which increases the permeability of the blood-brain barrier) enhances the anticonvulsant power of luminal(7).

SENSORY STIMULATION

Differences in cortical responses to various chromic stimuli were ascribed to the differences in brightness and not in wave length (56). Recovery curves of the amplitude of evoked cortical (but not cochlear) potentials show 8-per-second oscillations (using paired clicks with variable intervals)(61). Suprasylvian responses to auditory stimuli were revealed in cats (same latency but lower amplitude than the classical ectosylvian responses)(51). Evoked hippocampal auditory responses with latency longer than those in the neocortex were described(45). An oscillating component in the hippocampal response to the sensory stimuli consists in high amplitude 3- to 6-per-second waves persisting for a relatively long time and also elicitable by the stimulation of the reticular formation. This contrasts with the usual desynchronizing effects of reticular stimulation upon the neocortex(33).

Irradiation pathways for photic-metrazol responses in cats are both diencephalic and transcortical(40). By electrography, somatic sensory topography of the cerebral cortex was outlined for the chimpanzee(78) and localized functional neuronic systems were identified in the thalamus of man(55).

Clinical Studies

TUMORS

Abnormalities are more polymorphic in frontal than in temporoparietal tumors(48).

Most of the misleading foci were found in the temporal regions(37, 69). In posterior fossa tumors, dysrhythmia occurs more often than arrhythmia, the former being due to a compression of diencephalic and occipital neurons(29). The occurrence of parasagittal antero-posterior and parasagittal lateral variability of EEG patterns hints to the presence of subtentorial tumors(4).

TOXIC STATES

Focal abnormalities occur after methylbromide intoxication(70). No EEG abnormality followed treatments of tuberculous patients by isoniazid, despite earlier reports of toxic convulsions occuring after administration of this therapy(77). Improvement in preuremic disease could be best followed by EEG(32). The effects of hormonal therapy could be followed satisfactorily by EEG in endocrine disorders (11, 26).

CIRCULATORY, DEGENERATIVE AND RELATED DISORDERS

EEG abnormalities depend more upon the underlying disease entity than upon the degree of reduction in blood circulation and oxygen consumption. For the same level of circulatory disturbance, older arteriosclerotics rarely show abnormalities, while abnormalities are frequent in hypertensive encephalopathy and are common in cor pulmonale (36). Conversely, in patients with multiple sclerosis, incidence of abnormalities correlates with disturbance of blood circulation (41). EEG abnormalities were found in 2 cases with thrombocytosis(72). About 50% of patients with senile cataracts(68) show abnormal EEG's.

Paroxysmal discharges in cerebral palsy patients without clinical seizures are rare during the first year of life, reaching a maximum at age 5 and decreasing afterwards (31). A remarkable improvement of epileptic manifestations after hemispherectomies is associated with the normalization of the EEG on the remaining hemisphere(17, 58). EEG is not a suitable method for selection of patients for such an operation(17).

EPILEPSY

Diones are not advised in cases with mixed epileptic disorders characterized by very short periods of spike-and-waves, by a lack of harmony between spikes and waves, and by slow cyclic waves preceding the discharge (71). There are marked individual differences in regard to the functional impairment during the generalized bursts of spike-and-waves. Speech and light touch are most easily affected during spike-and-wave discharges, while memory and pain sensation are affected to a lesser degree(20). Cases with migraine associated with paroxysmal dysrhythmia are amenable to the anticonvulsive therapy(76). Several cases of epileptic seizures with EEG's normal during the spells were described, suggesting deep epileptogenic foci(15).

BEHAVIOR DISORDERS

There is a high incidence of 6- and 14-per-second positive spikes in the temporal and occipital regions in patients with impulsive-compulsive behavior(65). Such patterns could be reproduced by a topical application of depressant drugs on the cortex(34). Mental patients without seizures, but showing paroxysmal and nonparoxysmal abnormalities, improved clinically and EEG-wise by dilantin. Such patients usually show affective rather than ideational symptomatology(52).

DEPTH ELECTROENCEPHALOGRAPHY

Chronically implanted intracerebral electrodes in psychotic and nonpsychotic patients revealed alpha and beta waves, *K* complexes, etc., in depth of those areas which exhibit such waves on the surface(8, 23). The most interesting finding is the presence of irregular slow waves in the deep frontal regions in schizophrenics(8), although, possibly, such waves may be present in nonpsychotic individuals(23).

This review recounts briefly the extent of current EEG research. Its main goal is to separate practical applications from basic research and to reveal facts of general biological significance in the every-day clinical observations.

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CLINICAL PSYCHOLOGY

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As in previous reviews, clinical psychology will be considered here as the application of psychology in all its methodological and topical plurality to a particular set of problems. As things are developing in the social sciences, psychology is a subject matter more in name than in the reality of its present compass. It is more safely defined as a graduate curriculum, as a position description, or as an affiliation with a department in a university, rather than an autochthonous subject. There is no such thing anyway, at least not in the sciences dealing with human conduct. Among them psychology is that phase in which emphasis on individual behavior and experience becomes maximized. It would be hard to say where sociology and cultural anthropology or biology and neurophysiology end and where psychology begins. Hence the selector of "psychological" contributions is always faced with the same difficulty—aside from the fact that psychology is not only the most universal and encompassing but also the most articulate and communication-conscious endeavor in the human sciences. Should contributions be selected only from psychologists? Or should they deal exclusively with individual behavior irrespective of authorship? Neither corresponds to present practice, nor to the needs of research. This report has not enough space to pursue principles. A number of books and studies will be discussed briefly which, as theory or practice, have bearing on clinical problems, and thus may be of interest to the readers of this Journal.

1. *Systems of Personality Study.*—Traditionally, in psychology the use of a strict methodology is being stressed, preferably one modeled after the principles that underlie experiment. In its manifest aspirations as much as in its implicit scheme of values psychology wishes to be an experimental science. Broad systematic aims often can be realized only in textbooks where they protect themselves through a profusion of quoted experimental evidence against the ever present suspicion of "speculativeness." One continuum of psychological thinking is that ranging from the purely qualitative, descriptive, and interpretative to the experimental and quantitative. "Quantitative" without undue philosophical qualms is usually identified with "scientific," and thus with "proper" and "right."

The only major study on personality with a view to clinical problems published this year stands on the quantitative extreme of that continuum. In *The Scientific Study of Personality*(4) Eysenck scorns all methods that have to do with "that spirit of uniqueness," with interviews, or projective tests. He disowns dynamics or psychoanalysis in favor of a static kind of behaviorism. What matters is scientific procedure. Whenever the author, rather infrequently, becomes aware that neither his answers nor his questions come close enough to the problems of present day psychopathology, he makes the characteristic reply of all psychological fundamentalists, namely, that a science has to concern itself first with the problems it can handle properly. As in physics, it must be prepared to be at a distance from the facts of life, as they are immediately experienced, for the sake of accuracy and formal simplicity. A secure foundation is more important than any hasty application. This book is "concerned with the problem of taxonomy in psychology; the question of clarifying and isolating traits and types, and of measuring them objectively." Eysenck's method is factor analysis following the tradition of Spearman's school. His data are derived from "objective behavior tests," measures of highly structured, nonverbal reactions which are objectively scored and require no interpretation. This book continues the endeavor of the author's previous volume, *Dimensions of Personality*(5). It stands in line with a growing number of studies in this country and in England, advocating and employing factor analysis as the only method open to a truly scientific study of personality. In Eysenck's case, as in that of others, one must wonder why so much objectivity has not yet produced an array of basic categories or "dimensions" on which all factor analysts would agree. Why, for instance, do Eysenck's results not ally with those of Cattell? Eysenck's

book is clear and well written. Its bias, if nothing else, gives it color. In spite of its pugnacity and really extraordinary intolerance of any other view, it is highly readable and provides a good introduction into the rationale of factor analysis. Some of its results, such as the heterogeneity of psychotic and neurotic personality syndromes, are of general interest. Eysenck's book, in short, has the virtue of the extreme: it is paradigmatic, representing not only itself, but the ideas and methods of an important school of thought.

2. *Theory, Criticism, Methodology.*—Blum(2) presents an introduction into the several psychoanalytic theories of personality in developmental and topical order. As an overview, as well as for comparative and systematic orientation, this book will be very helpful. Hilgard, Kubie, and Pumpian-Mindlin(9) in yet another Hixon lecture present a critical discussion of the scientific standing of psychoanalysis. Their book offers a much needed discussion of the problems of exact, evidence-conscious research in the field of psychoanalysis, its criteria and methodical conditions, and its persistent problems. Festinger and Katz have edited a handbook on *Research Methods in the Behavioral Sciences* (6). Their volume surpasses existing compilations on this subject through comprehensiveness, scope, and perspicacity, as well as in the organization of such an enterprise. In the introduction, Newcomb succeeds in presenting in a few pages an outline of the interdependence of social-psychological theory and method. Of special interest for psychiatric research will be sections on field studies by Daniel Katz; on laboratory experiments by Leon Festinger; on theory and methods of social measurement by Clyde Coombs; on the analysis of qualitative material by Dorwin Cartwright; and a final chapter on the utilization of social science by Rensis Likert and Ronald Lippitt. To a more specific problem of steadily growing importance Cartwright and Zander have contributed a handbook on Group Dynamics(3). In it a variety of discrete studies were organized and placed into a systematic framework. The book stresses theory and research rather than therapy and interpretation. A large-scale study of the latter field is reported by Powdermaker and Frank(12).

3. *Life Histories, Compendia, Diagnostic Techniques.*—Describing the slow multifarious reconstruction of life history through interviews and psychological diagnostic techniques, White(14) demonstrates a method by relating a series of case studies of personality by which the study of abnormal types should be gauged—namely, the normal personality. In view of the growing impact upon psychiatry of such social science concepts as culture, the second, amended edition of *Personality: Nature, Society and Culture*(10), a collection of papers on topics represented by the title, and edited by Kluckhohn, Murray and Schneider, should be of general interest. An outstanding new textbook in social psychology should also be mentioned: Asch's *Social Psychology*(1) which provides not only a great deal of well-organized, critically sifted information, but also a viewpoint that makes this book a system of social psychology, based essentially on the principles of Gestalt psychology.

Among recent contributions to diagnostic methods in clinical psychology, Harrower(8) offers a highly readable introduction to the use of psychological tests; one should perhaps say, to the contribution of the diagnostice psychologist to the practice of medicine. Halpern(7) published a volume on the clinical approach to children's Rorschachs. After a short statement of theoretical premises and considerations necessary for administering and scoring the Rorschach with children, significant test factors, the nature of the stimulus (inkblot and test examiner) are discussed, and the general problems of interpretation outlined. The rest of the book consists of a great variety of instructive cases. Finally, Phillips and Smith(11) present a book of advanced studies on the Rorschach test. Textbooks in this field have tended for obvious reasons to peg themselves at an introductory level and so to spend most of their space on basic procedures. This book focuses primarily on interpretation. It takes account of the expanding number, variety, and intricacy of factors currently employed in the interpretation of the test. Ranging from the use of developmental levels in normal and pathological perception (as worked out by Friedman, Siegel, Hemmendinger, and Peña) to the indigenous structural suggestiveness of the Rorschach cards

(the so-called card-pull), a vast array of old and new factors is evaluated as to their potential interpretative yield. Phillips's most personal contribution is in his ideas on content analysis. Based as they are on a determined use on the genetic propositions of psychoanalysis, they are nothing if not controversial. Such an interpretation of content presupposes a fixed suprapersonal relationship of image, or symbol, to need and conflict. This assumption is questionable on several grounds. It is a question, too, whether the "deep" reconstructions of psychoanalysis can be taken out of the context of on-going therapy. How then can content analysis work? The logic, as in so many other instances in this field, is precarious. In spite of strong critical misgivings, however, this reviewer can testify to the diagnostic efficacy of the method when it is in the right hands. Phillips has also integrated the existing rationales of standard Rorschach categories and has sometimes added suggestive new ideas to the accepted old. The contribution of the book is its expansion of the possible psychological meanings of Rorschach eyperiment. Such thinking-it-through has been needed for a long time. If the propositions ensuing from it cannot be validated, we must be content to operate for the time being with the most plausible hunches. The only obligation of the psychologist who does so is to leave no doubt of the unfinished status of his argument, a point which in Phillips's case might have been reiterated a few more times. Apart from its concern with one specific technique, this book is in method and viewpoint almost the exact opposite of Eysenck's, and thus again is representative of a trend in present-day clinical psychological practice.

Watson in a recent article(13) has systematically outlined the history of clinical psychology. The significance of this study, however, is more than historical. The ideological issues of a science are made conscious through its history which therefore is indispensable for its logical growth.

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CLINICAL PSYCHIATRY

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In the following we have selected a few papers in clinical psychiatry and psychosomatic medicine which we believe illuminate particular problems. Many more could have been quoted but referral to these papers with one or two lines would not fulfill the purpose of such a review. The selection of papers, of course, is objective and others may have selected different contributions. Selection is not based on the merit of a paper, but on the idea of calling attention to certain aspects of clinical psychiatry at present in the foreground of interest.

There is an increasing awareness of the fact that a great many psychiatric therapies are advocated, somatic and psychotherapeutic, whch are not justified with sufficient evidence as to their validity. Dr. Zubin(1) discussed the present methods of evaluating the outcome of therapy in mental disorders

and found these methods leave much to be desired. The main difficulty comes from the fact that data reported are usually not satisfactory for evaluation. He would like to establish a center where a standard population of patients might be housed. The standard hospital population should be specified with regard to age, sex, background factors, like symptoms, duration of disease, age of onset, and other pertinent variables. This standard population would serve as a proving ground for the relative efficacy for the various types of treatment now in use. In various centers psychotherapy and somatotherapy could be tried out on comparable groups possessing the same characteristics as the standard population. After a 5-year follow-up on such a population, comparative data would be obtained based on the standard population figures and the figures on the particular group receiving some special therapy. We feel that Dr. Zubin's criticism of the sad state of affairs concerning evaluation of therapies is correct. This is even more pronounced concerning psychotherapies than somatic therapies. The above-suggested plan, however, would run into great difficulties because it would be nearly impossible from an administrative point of view to keep such a population standard. Furthermore, the matching of patients in other hospitals with the standard group would be difficult. Most likely controls would have to be used in the same hospital by matching the patients receiving therapy and, in order to control other variables, the same investigative work would have to go on in other hospitals simultaneously.

Appel and his co-workers (2) discuss prognosis in psychiatry and point out the well-known, but not sufficiently appreciated, fact that a great many therapies are advocated that have not been scrutinized and evaluated adequately to assess their true value. This is especially true not only in statistical terms for psychotherapy and psychoanalysis, but also for such somatic therapies as CO_2 and corticoid application. Discrepancies are wide in the reports on evaluation of psychotherapy. Evaluation of the patient before and after treatment by someone other than the therapist would contribute to the objectivity of therapeutic results. In their statistics they found that insulin is immediately more effective in the treatment of schizophrenic patients than psychiatric hospitalization alone. Five years after treatment 27% of both the insulin and the nonspecific therapy groups of schizophrenic patients were well or much improved. For affective psychoses the rates of recovery and improvement with electroshock therapy were significantly higher than those for nonspecific therapy—71% and 58% respectively. In the studies reviewed, no treatment was shown to be significantly better than another for the psychoneuroses.

An important paper is that of Alexander (3) on current views on psychotherapy. He states that because many of the analytic concepts are accepted today both by analysts and nonanalytic psychiatrists, the theoretical knowledge of psychodynamics is a part of a basic knowledge of psychiatry. He also states that it is becoming more and more difficult to make a sharp distinction between psychoanalytic treatment and other methods of psychotherapy. In actual practice psychiatrists are becoming more and more alike, some practicing pure psychoanalysis and others practicing psychoanalytically-oriented psychotherapy. Alexander also makes the point that while it is customary to divide psychotherapeutic procedures into 2 categories, the supportive and the uncovering, it must be borne in mind that supportive methods are unknowingly or inadvertantly used in all forms of psychotherapy, and conversely some degree of insight rarely is absent from any sound psychotherapy. Thus, in this complex field, pedantic distinctions do not do justice to the actual happenings. In this article Alexander also quite correctly emphasizes the error of holding that supportive psychotherapeutic methods require less technique and theoretical preparation than psychoanalysis.

There are many other fine points in this article. To mention only one, however, there is a strong tendency to differentiate between psychoanalysis and psychotherapy in quantitative terms, namely, the frequency of interviews, duration of treatment, and whether the patient should lie on a couch or be treated face to face. All these are used to differentiate psychotherapy from psychoanalysis where actually the distinction is probably

between primarily supportive and uncovering methods. In our opinion, however, even this boundary is becoming obsolete. We would like to quote Alexander's final remark as an example of broad vision in connection with development in psychoanalysis and integration of dynamic principles into the general body of psychiatry:

> Many experienced analysts have expressed their reservations toward these quantitative variations of the so-called classical procedure and are inclined to consider them as dilutions of the classical procedure. Only time will decide the practical use of these variations. One thing is certain: the mere repetition of routine—and the rejection of new suggestions as a threat to the purity of psychoanalysis—can lead only to stagnation. Further improvements of therapeutic technique can come only from a persistent re-examination of our theoretical premises and from relentless experimentation with technical modifications.

Two well-known neurotic mechanisms in relation to ambivalent actions are pointedly reformulated by Dr. Angyal(4) in discussing evasion of growth—2 typical methods of neurotic behavior. He feels the first of these methods is an essential component of the obsessive compulsive character. It can also be found in other personality constellations. This method is an evasion by noncommittment and consists of a peculiar combination of saying "yes" and "no" at the same time. When entering into a new situation the individual tries to say "yes" but being fearful of the consequences does not commit himself wholeheartedly. This method of noncommittment has a model in the play activities of the child eagerly anticipating what is to come, yet fearful of the novel and the unknown; the child practices adult roles and activities in his "make-believe" play. These individuals' lives remain make-believe. They go through the motions without ever being completely committed to any actions or to an interpersonal relationship. They refuse to take responsibility not only in the sense of not accepting duties imposed from the outside, but also in the sense of not identifying themselves with their own actions. They constantly sit on a fence. The other mechanism described is evasion by vicarious living. This is found in persons whose living is structured on another person and is often mistaken for love. Such very intense and tenacious attachments, however, lack the essentials of genuine love. They could better be defined as states of possession. These individuals try to substitute for their own personality the personality of another person. The repression of their genuine spontaneous impulses leaves these persons with a painful emotional vacuousness. This is then covered up with excessive pseudo emotionality, the typical hysterical dramatization. The author believes that both these patterns of adjustment are found frequently in the neuroses and that they can be understood as attempted solutions of the conflict between the impulse to growth and the fear of facing new situations.

Interest in childhood schizophrenia is increasing. The large number of adult schizophrenics who have shown marked emotional deviations in their childhood is being demonstrated more and more. Dr. Weil(5) analyzes the clinical data and dynamic considerations in certain cases of childhood schizophrenia. She agrees with Dr. Bender's formulation that, in such children, developmental delays and accelerations show over or underfunctioning in various fields and a continuous failure in homeostasis. These manifestations are also associated with a great deal of anxiety and stereotyped behavior. Dr. Weil found that these children show a poor patterning in their development and makeup. They show a conspicuous delay in ego development. She also stresses the large amount of anxiety and anxiety equivalents present which appear as neurotic symptoms. However, these children are not neurotic. Neurotic children also show minor developmental deviations and certain immaturities and ego limitations, but their manifestations are not as abundant and as varied and interchangeable as in the schizophrenic cases. The neurotic child does not show marked ego disturbances. These schizophrenic children show early deviations in various fields—disturbed patterns of eating and sleeping, disturbances of digestion, marked acceleration or retardation in the development of motility and language. Many of them display a gamut of neurotic manifestations—hypochrondriacal complaints, compulsive habits, obsessive preoccupations, and different anxiety symptoms such as phobic manifestations. She points out that many

such children lack nuance and proportion. They react in the extremes, and very rarely in the middle line. They are rigid in their habits and thinking. In contrast to neurotic children, they betray their conflicts very openly. Dr. Weil believes that constitutional factors seem to combine in these patients, in varying proportions, with early distress resulting in an increased anxiety potential. Lack of structure or focus can be observed with regard to anxiety as well as with regard to aggression and passivity. She emphasizes quite correctly that, based on our present knowledge, there is not one new fact in the clinical symptomatology that is pathognomonic. It is the entire picture characterized by retardation in ego development and anxiety in its many manifestations.

Schacht(6) discusses the treatment of schizophrenia and borderline states. There is an increasing interest in the psychotherapy of schizophrenia and the borderline conditions. It would be important to determine how far psychotherapy is effective and in what form it should be applied to obtain optimal results. It is realized more and more that the classical treatment of neurotics is not applicable to schizophrenic patients, and even though the pseudoneurotic cases of schizophrenia show many neurotic mechanisms, their treatment is closer to that of an overt schizophrenic than of a neurotic. They feel that several points are important in the treatment of these patients. They avoid analyzing the psychotic ideation; they avoid the use of free associations. Whatever is valuable, or potentially valuable, in the life of the patient is employed. The family is employed in treating the patient and the great importance of flexibility as a therapeutic technique is stressed. The treatment of these patients is very complicated and in a great many cases unrewarding. We are still groping for more effective techniques. However, therapeutic methods are emerging slowly which are calculated at least not to be damaging. It is these patients discussed by Schacht who show the greatest number of therapeutic failures, and in whom gross psychotic reactions are precipitated by unskilled handling.

Even though their findings are negative, Dickes, *et al.*(7) show clearly the controversy raging around the importance of adrenal neurotic function in relation to schizophrenia. In contrast to those who think that schizophrenic persons show a deviation in excretion of ketosteroids and an abnormal response to ACTH administration, Dickes, *et al.* arrive at the following conclusions: the adrenal cortical response of the schizophrenics studied, as measured by the eosinophile and lymphocyte response to ACTH and by physiological variation, falls within the normal range. Studies of the 17-ketosteroid and corticosteroid excretion after ACTH in 11 cases of acute schizophrenia showed a varying response in different subjects. Wide variation in the fasting levels of eosinophiles and lymphocyte counts were found among different patients and even in the same patient from day to day.

In the foreground of interest in the field of psychosomatic medicine is the specificity of autonomic responses discussed by Lacey *et al.*(8). They investigated the correctness of the hypothesis of autonomic response specificity, but with the extension of the principle of relative response specificity. It is assumed by many that for a given set of automatic functions, individuals tend to respond with a pattern in which maximal autonomics activation occurs in the same physiological function whatever the stress. In general, this assumption was supported by their investigation which was carried out on 85 male students subjected to 4 stresses in sequence: mental arithmetic, hyperventilation, letter association, and the cold pressor test. The vegetative response was measured by palmar conductance, heart rate, and variability of heart rate simultaneously and continuously recorded. It was found that some individuals responded with the same autonomic activation regardless of the stress. Others showed fluctuation from stress to stress even though they exhibited one pattern of response more frequently than others. Still other individuals randomly exhibited one pattern and then another. Quantitative differences between degrees of activation of the different physiological functions fluctuated widely. These findings are much more in accordance with clinical observations about the response of the vegetative nervous system to stress than the rigid specificity assumption of former days.

The psychosomatic investigation of obesity continues and studies that explain this condition in extreme terms of organogenesis or psychogenesis are now followed by more balanced presentations such as that of Schopbach and Angel(9). Obesity was the subject of a joint investigation undertaken by the endocrinogic, anthropologic, psychiatric, and social service departments of Jefferson Medical College in Philadelphia. It was found that obesity is regulated by genes, which (1) accelerate the total body growth rate, (2) tend to stop both physical and emotional growth earlier than usual, and (3) sensitize the hypothalamic appetite mechanism. The presence of all 3 of these genes produce a potentially obese person. The occurrence of stress situations may precipitate overeating which is usually accompanied by other neurotic or psychotic mechanisms. Overeating is associated with passivity, dependence, intolerance of responsibility, and repressing aggression, all amounting to emotional immaturity.

Kotkov(10) undertook the study of group psychotherapy in obese adults. He had approximately 15 group psychotherapy sessions with obese adults of both sexes and mixed marital status, with an age range of 20 to 40 years. No amazing over-all weight loss occurred, but he believes that group psychotherapy served as a relationship experience for the maintenance of weight loss in 48% of the patients who did not succeed with other methods.

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PHYSIOLOGICAL TREATMENT

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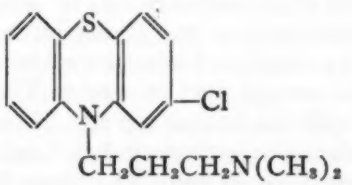
The use of sleep treatment is increasing everywhere and has at last begun to evoke greater interest here. Several Americans contributed to a valuable new book on the subject edited by Norry(1) of Buenos Aires; another book on sleep therapy by Angel(2) has appeared in France, while elsewhere in Europe an extensive literature is emerging. The outstanding successes of Putnam and Rothenberg(3) with the prolonged narcosis treatment of epilepsy (using diphenylhydantoin) were reported without reference to this large literature. The related use of intravenous procaine by Olsen(4) and others(5, 6) is also finding a place in our medical practice. The whole subject has recently been given great impetus by the discovery of a remarkable new ganglioplegic and sedative drug, 4560 RP, by Laborit (7-9) in France.

4560 RP and Sleep Treatment.—While studying a series of dibenzoparathiazine derivatives for the purpose of enhancing the action of general anesthetics, Laborit and his associates synthesized a drug with a number of unique properties. This drug, which he labelled 4560 RP, is a chlorinated phenothiazine with the following structure:



10 (γ-dimethylaminopropyl)-2-chlorophenothiazine hydrochloride

Though it was originally intended for use in the management of general anesthesia or

severe wound shock, its range of applicability rapidly widened (10-14) after its commercial introduction under the name Largactil (distributed in this country by Smith, Kline, and French Laboratories under the name of Compound 2601-A or Chlorpromazine). It is primarily a ganglioplegic; its action is described as vagolytic, sympathicolytic, spasmolytic, antipyretic, antiemetic, and sedative, with a potentiating effect on other hypnotics, narcotics, anesthetics, and analgesics. It is mainly a vegetative inhibitor and to a lesser extent a sedative. It is much more effective than other available autonomic agents but its over-all action is both simpler and less dangerous than that of the ordinary psychiatric treatment measures. It may be applied to the treatment of all conditions in which vegetative disturbances play a role, such as anxiety states, severe neuroses—including obsessions—symptoms following drug withdrawal, manic-depressive disorders, certain cases of acute and florid schizophrenia, and in a wide variety of psychosomatic disorders. Clinically it induces a slowing of the pulse, a lowering of temperature, blood pressure, and basal metabolic rate, a slowing of respiration and a very brief transient leukopenia. When used in combination with other sedatives it usually doubles their potency. It is available both in tablet form and in aqueous solution, and may be administered by intramuscular injection, by vein or by mouth. When used in the prescribed manner it induces somnolence or lethargy or actual sleep, especially when combined with sedatives. The patients talk little, display a shallow affect, and prefer to be left alone. There is a general psychomotor retardation; the sensorium however remains clear and all intellectual functions intact.

Details of management can be studied in the papers referred to. Treatment is maintained by continued administration of the drug for several days or weeks. The daily dose should not exceed 200 mg. Because of the tendency to orthostatic hypotension patients are kept in bed. The room is kept quiet and darkened and much time is spent in sleep. Mild and transient disorders of liver function have been observed(15), vascular collapse and undetected infections (because of the low temperature) are dangers, but the procedure is on the whole remarkably safe.

Because the body temperature is lowered the method has come to be known as the hibernation treatment. Deschamps and Cadoret(12) claim success with its use in combination with other sedatives in the management of cases of delirium tremens, acute amentia, depressive and manic states and acute hallucinatory psychoses. Because of its antiemetic action it has been successfully used both here and abroad(16, 17) in the management of vomiting of pregnancy and in other conditions where nausea and vomiting are prominent symptoms. It has also been used in the management of carbon monoxide poisoning(18) and prolonged insulin coma(19). Bergouignan(20) agrees with Delay and Deniker that its combination with other sedatives is usually superfluous.

A somewhat similar ganglioplegic agent called C 9295, a pendiamide, was found helpful in depressions(21); Smith(22) found he could relieve distress in 17 cases of anxiety neurosis by using the sympathetic blocking agent hexamethonium. Funkenstein and Meade(23) have revived the use of intravenous ether. Prolonged electrical narcosis also has its adherents (24-26).

The more usual techniques of prolonged barbiturate sleep continue to be widely used for a great variety of diseases(27-32). Wiedner (33, 34) has used the treatment for years and has accumulated experience with 600 cases. He feels it is useful not only in frank psychiatric illness, and in psychosomatic conditions such as asthma, migraine, rheumatoid arthritis, and allergic states, but in a great variety of acute infectious illnesses as well. In describing his techniques of management he points out that once the patient is accustomed to sleep after each injection, a simple saline injection can, through conditioning, induce the same result for a period of time. Andrejew(35) points out that the procedure has valuable diagnostic significance in pointing up and eliminating the cerebral components of a disease process, whatever it may be. Panchenko (36) reports good results in a series of 100 cases of psychosomatic disorder. Busalow(37) emphasizes its value in the pre- and postoperative management of surgical cases.

Insulin coma or subcoma treatment now looks like a variant of sleep therapy, and Weitzner(38) is reviving its use for a variety of allergic, psychosomatic, and other disorders, including rheumatoid arthritis, gout, serum sickness, psoriasis, and sleep paralysis (39). Alexander and Neander(40) believe that a beneficial response to both insulin and electroshock treatment can be expected in all cases that show an antiadrenocortical effect, as reflected in an increased eosinophilia.

Electroshock Treatment.—EST has been successfully used in 34 cases of drug addiction to relieve withdrawal symptoms(41). It can relieve a psychosis associated with pernicious anemia(42), sometimes alleviate the paralysis of hemiplegia(43) or relieve a premenstrual psychosis(44). Cerebral palsy is no contraindication to its use(45), nor is multiple sclerosis, Parkinsonism, recent head injury, cerebrovascular accidents, or epilepsy (46). Intensive and prolonged treatment in chronic cases gives good results(47). Winiarz and Hoffman(48) found that the fear of activating a tubercular process with EST is almost always unfounded. Old age is no barrier to treatment(49). Robinson and DeMott(50) treated 6 carefully selected patients over 80 years of age with EST and all took the treatment well, though one suffered a transient coronary attack a few days later. Sisler and Wiit(51) remind us however that EST is a far from innocuous procedure, and scores of deaths have already been reported in the literature. Routine electrocardiograms, especially in the older age groups, are a wise precaution. A recent history of coronary disease represents a special danger and the use of muscular relaxants is especially indicated in such cases to prevent heart attacks as well as fractures.

For these reasons various experimenters continue to look for ways to lessen the force of the convulsive reaction. Subconvulsive stimulation(52, 53) is very distressing to the patients, often does more harm than good, and probably has its safest indication for the relief of barbituate coma(54) or to hasten the awakening from insulin hypoglycemia(55). A new relaxing agent RO.3. 0386, (heteropolymethylene-bis-trimethylammonium diiodide) appears to be especially safe and effective(56, 57). Its action is similar to that of curare or succinyl choline dichloride(58) but less dangerous, for its effect is self-limited to a few minutes. One of the most attractive procedures for mitigating convulsions is the concomitant use of anticonvulsants. Rompel(59) gives full details of dosage of Mesantoin for this purpose and regards his regimen as an improvement on Plattner's.

Cortisone and Thyroid.—Lidz, Carter, Lewis and Surratt(60) observed the response of patients under ACTH and cortisone treatment, confirmed the general impression that cortisone induces euphoria, but attributed much of this to the associated relief of specific symptoms. Fang, Martin, and Katzenelbogen(61), using conservative dosage, found that a substantial proportion—half to two-thirds—of a group of 27 schizophrenic patients responded well to cortisone therapy. A group of Canadian workers(62) have confirmed Gjessing's work on periodic catatonia, reporting the successful use of thyroid for this condition, and relating the disturbance to adrenal imbalance. In one of their cases cortisone also seemed to alleviate the condition. In a large series of psychiatric cases studied by Reiss and his associates(63), thyroid dysfunction was frequent and several cases were cured by thyroid treatment alone. Danziger and Kindwall(64) on the basis of a large experience, feel that the nonspecific stimulating effect of thyroid administration, if continued for at least 3 months, may be both ameliorative and curative in chronic or acute psychoses not otherwise responsive to treatment.

Other Treatments.—Meduna(65) proposes the use of nitrous oxide before and after CO_2 administration to allay the anxiety and distress so many patients feel with CO_2 inhalation. He believes the main area of usefulness for this therapy is in certain of the milder anxiety neuroses and agrees with the earlier statement of Loevenhart that "this treatment is of no permanent help in any psychoses." Lewis(66) feels that a simpler method of CO_2 administration, consisting of rebreathing from a paper bag, is of value in a variety of vague somatic disorders associated with habitual hyperventilation.

Salzer and Lurie(67), prompted by the observation that the antitubercular drug iso-

nicotinyl hydrazide (Isoniazid) often induced euphoria in patients under treatment, found it a helpful agent in the management of 41 cases of mild depression, though undesirable side-reactions, including psychoses, may occur if the dosage exceeds 5 mg. per kg. a day. Rey-Ardid(68) reports transient or sustained remissions in a large percentage of acute and chronic disorders that he treated with a modification of Speransky's spinal pumping method. Several of the cases that responded had previously failed to benefit from either insulin or electroshock treatment.

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PSYCHOSURGERY

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Selective operations enhance the therapeutic value of psychosurgery. These operations are equally effective and less damaging to the personality; so much so that standard lobotomy is on the wane. Transorbital lobotomy (9, 34), lower quadrant lobotomy (24, 25), bimedial lobotomy (27), orbital undercutting (6, 14), cingulate resection (19, 31), unilateral lobotomy (4), thalamotomy and hypothalamotomy (28), and novocaine injections (20) have been studied during the past year. The results are remarkably uniform. Freeman (9) in a report of 2,000 lobotomy operations concludes that transorbital lobotomy reduces the fatalities by 50%, and the undesirable sequels of prefrontal lobotomy such as convulsions, obesity, incontinence, and the "frontal lobe syndrome" by 95%.

The results of lobotomy are shown to be rather stable over a decade or more (11, 15, 33); the patients with psychoneuroses and affective disorders holding up better, however, than those with schizophrenias. In a general review Kolb (17) states: "It seems to promise return to the community of a greater number of patients with chronic mental disease who have been hospitalized for more than two years, than does any other therapeutic procedure." Tow (30) asserts: "That the operation of leucotomy is therapeutic is now beyond all doubt. It produces a considerable amount of relief in intolerable mental illness. The wild, disorderly schizophrenic frequently becomes quiet and manageable; the depressive is often relieved of his sadness and suffering; the tense obsessional becomes relaxed; and the anxious hypochondriac ceases to complain. Often, though not always, the distressing symptoms which form the core of the presenting illness are removed."

Some change in attitude is discernible concerning the relationship of operations on the frontal lobe to the total therapeutic picture. Instead of being the final act of desperation, lobotomy is now recognized as the turning point in therapy. Once the anxiety and obsessive thinking are reduced to manageable levels, the patients become accessible to other modes of therapy. Barahona Fernandes (2) finds that the change of personality leads to improved adaptation. James (16) agrees: "I would like to say at once that a personality change is one of the effects most earnestly to be desired from the operation of leucotomy. Without such change the procedure must be regarded as unsuccessful." A method of dealing with these changes is suggested by Cattell (7, 8) who has given intensive psychotherapy to patients both before and after psychosurgery: "At present there is no evidence to suggest that the basic personality structure of the individual is changed with topectomy. There is every reason to believe that all the conflict material is still present. Some of it is unconscious, but some is conscious, though the patient is no longer preoccupied with it, anxious about it, or unsuccessfully defending himself against it."

Psychosurgery is under ethical and moral scrutiny. Pope Pius XII (22) states: "But in virtue of the principle of totality, of its right to employ the services of the organism as a whole, individual parts may be destroyed or mutilated as long as it is necessary for the good of the being in its entirety, to assure its existence or to avoid, and naturally to repair, serious and permanent damage that could not otherwise be avoided or repaired." Baruk (3) and Freeman (12) are at opposite poles as far as justification of psychosurgery

is concerned. The latter queries: "whether these patients should be denied the chance of restoration to effective living through surgery."

Studies on psychosurgery are found in proceedings of 2 scientific meetings(1, 24). The monograph of Petrie(21) on psychologic changes makes interesting reading. The changes seem to be toward less preoccupation with the self and better socialization. Working with a colony of monkeys, Brody and Rosvold(5) showed that lobotomy reduces the rigidity and stability of the social structure. Convulsive seizures occur after prefrontal lobotomy in 25%, according to Freeman(10), but only in 1% of patients subjected to transorbital lobotomy. Linnemann(18) reports failure in the treatment of habitual criminals by lobotomy. Raskin, Strassman, and Van Winkle(23) have added to our knowledge of the pathologic changes of prefrontal lobotomy. Stengel(29) reports on the patients' attitudes to leucotomy and its effects, indicating that 31% of patients denied that any brain operation had been performed. Furthermore: "There was nothing nostalgic about the affective losses."

Temporal lobe operations for psychotic states have been reported by Scoville *et al.* (26), Freeman and Williams(13), and Vianna(32); but real success has thus far been achieved only in the treatment of psychomotor epilepsy(1).

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CHILD PSYCHIATRY. MENTAL DEFICIENCY

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CHILD PSYCHIATRY

There is perhaps no sign of progress more conspicuous than the fact that it becomes increasingly difficult to cover adequately even the outstanding annual events and contributions in a condensed review. There is a growing number of periodicals devoted to child psychiatry. It may be helpful to enu-

merate them in one place. In this country, we have the *American Journal of Orthopsychiatry,* the *Journal of Child Psychiatry,* the *Nervous Child,* the *Quarterly Journal of Child Behavior,* and the issues (in book form) of the *Psychoanalytic Study of the Child.* The Swiss *Zeitschrift für Kinderpsychiatrie,* the German *Praxis der Kinderpsychologie und Kinderpsychiatrie,* and the recently revived Italian *Infanzia Anormale* are important vehicles for current publications abroad. Besides, many articles have appeared in psychiatric, pediatric, psychological and educational journals. There has been a goodly number of handbooks, texts, and monographs. In view of all this, only a selection of even the significant contributions can be offered. Omission in no way implies lack of importance.

Books.—Two new monographs again direct attention to the work done in the Scandinavian countries where fact finders go about collecting data and drawing careful conclusions from them. One, by Øster(1), is a "clinicogenealogical investigation comprising 526 mongols living on Sealand and neighboring islands in Denmark" between 1925 and 1949. The other, by Annell(2), is a study of pertussis in infancy as a cause of behavior disorders in children, done at the University Hospital of Uppsala. (A similar study, by Schachter in France(3), of 200 children who had "non-complicated" pertussis during the first 3 years of life tends to confirm Annell's findings that early occurrence of this disease may be responsible for a higher incidence of behavior disorders.) The self-imposed limitation to a strictly circumscribed area of research, the humility which lets the facts speak for themselves, and the abstinence from rash generalizations are truly impressive and worthy of emulation.

This is in sharp contrast to the talkfest published as the transactions of the sixth conference on problems of infancy and childhood, sponsored by the Josiah Macy, Jr. Foundation(4). An honest participant, who herself has done substantial research, spoke of a "peculiar conglomeration of impressions, thoughts, and fantasies." Opinion, often expressed in abstruse terms, makes a hash of the few facts which have crept into the discussion.

H. and R. M. Bakwin, 2 pediatricians interested in child psychiatry, have brought out a book(5) on behavior disorders and their clinical management, "designed as a practical guide not only for the physician but for professional workers in the field of child psychology." Avoiding controversial issues and steering clear of unproven speculations, it offers an orientation in the realm of that which is known. It reflects the progress that has been made since the appearance in 1942 of their earlier volume on the psychological care during infancy and childhood(6). The authors have for years kept their colleagues alerted by frequent articles in the *Journal of Pediatrics,* under the general heading: "Psychological Aspects of Pediatrics," to which others have also contributed. (In 1953, the Bakwins have written on poor appetite(7), the comics(8), homosexuality(9), and schizophrenia(10); Peterman(11) has discussed behavior in epileptic children; Brazelton, Holder, and Talbot(12) have a thoughtful article on the emotional aspect of rheumatic fever.)

There has, of course, been the usual crop of books intended for parents. By far the best of those published in 1953 is the one by Teicher(13), which is full of sound information, solid and sympathetic understanding, and good advice.

Of last year's books on projective methods of investigation and treatment, *Children in Play Therapy* by Moustakas(14) can be especially recommended.

Attention should be called to a public health monograph by Ullmann(15), an attempt "to survey the nature and extent of the mental health problem presented by a group of children in the ninth grade of a public school system and to develop a method for identifying individuals who need care." This type of study, inaugurated by Wickman in the 1920's, is brought up to date, with improved methodology and broader implications.

Periodicals.—Childhood schizophrenia has received special consideration in a symposium published in the *Nervous Child*(16). A comparison with an earlier symposium in the same journal in 1942 indicates that much progress has been made in the past decade. It is highlighted in Hendrickson's well-organized article on current views about eti-

ology. Chess and Rubin discuss treatment in a child guidance clinic. Kornfeld suggests that "the development of schizophrenic disorders can best be explained in terms of a morbid interaction of various constitutional, environmental and possibly organic factors." Case reports are offered by Harms and by Langer. The Sacklers plead for utilization and integration of "every available diagnostic modality, biologic as well as psychiatric and psychologic." Anderson recommends "a much closer attention to physiological pathology than is current." Bühler distinguishes between 3 consecutive phases in response to psychotherapy. Mehr gives a detailed report about the application of psychological tests and methods. Kestenberg presents 3 cases of what she calls "pseudoschizophrenia" and Klein reports a schizophrenic state simulating retardation and auditory impairment. These and a few other articles make up an extremely instructive issue (which, it is feared, may prove to be the swan song) of the journal.

That childhood schizophrenia, thought to be practically nonexistent a few decades ago, has become a matter of much contemporary interest, is also shown by other reports of clinical studies and etiological theories. Mahler's(17) paper on autistic and symbiotic infantile psychoses is a major forward step in the direction of certain clinical differentiations. Weil(18) discussed cases of "early or subclinical schizophrenia" which "do not show regression but inadequate progression." Stern and Schachter(19), describing 4 cases of early infantile autism, suggest that this condition be studied for the time being as a specific phenomenon, to which they refer as "Kanner's syndrome." Weber and Klopp(20) reported a 14-year-old boy who displayed an "exogenous" schizophrenia-like psychosis following septic osteomyelitis and ending in complete recovery under insulin therapy after 8 months. Sherwin(21) studied reactions to music of 3 autistic children, 2 of whom were identical twins.

There were a number of symposia presented at meetings of the American Orthopsychiatric Association. Of special value to child psychiatry are the round-tables on the psychodynamics of juvenile delinquency (22), on the emotional reactions of children and families to hospitalization and illness(23), and on the Bronx Pilot Project under the auspices of the New York City Youth Board(24). Only a few other articles from the pages of this association's meaty journal can be mentioned here: a follow-up report on children who had atypical sexual experiences, by Bender and Grugett(25); an experimental approach to aphasic and to nonreading children, by Barger(26); a study of juvenile alcoholism, by Falstein(27; and a discussion of maternal attitudes during and after pregnancy, by Zemlick and Watson(28).

Krall(29) compared 32 children between 5 and 8 years of age who had 3 or more accidents in the preceding 4 years with 32 children of the same age who had had no accidents. The former were more active, indulged in more aggression in doll play, showed less inhibition, expressed more commands and threats, came from larger families, and were somewhat later in birth order.

Schneersohn of Tel Aviv(30) completed a series of articles on *Lesesucht,* the preoccupation of certain children with reading to the exclusion of other activities. The author's earlier and present work deserves to be known better in this country than it is.

Mother-child relationship has come in for much discussion and speculation. Though its enormous impact on children's personality development cannot be questioned, it seems to this reviewer that other factors are often neglected. The motto in a number of publications seems to be: *Cherchez la mere,* and nothing else. This is especially evident in an article by Staver(31) on learning difficulty, one on suicidal attempts by Libermann(32), and one by Hilgard(33) on "anniversary reactions in parents precipitated by children." A more realistic note is struck by Bowlby(34) in his discussion of the effects of early mother-child separation.

Excessive permissiveness in child rearing has been criticized by Zimmerman and Burgemeister(35). Their paper should serve as a sobering admonition to those who mistake permissiveness for submission and unconditional surrender to what some theorists have decreed to be a child's needs.

MENTAL DEFICIENCY

A marked upswing of public interest has come through parents who got together in many communities and recently formed the National Association for Retarded Children, which held its first convention in Chicago in October 1953. The stimulation and support coming from this active group may well become a major factor in the improvement of facilities and the promotion of research.

The needs and feelings of parents have been given more attention than heretofore. A real service has been rendered them by Levinson(36), whose book written for their orientation deals in a helpful and practical manner with the problems and concerns which assail them. Articles by Kanner(37) and by Richards(38) have also attempted to emphasize the significance of the "parents' viewpoint." Growing interest on the part of the medical profession was shown by the publication in *Postgraduate Medicine* of an article on the problem of mental deficiency in children(39).

Porteus and Corbett(40) have rendered a great service by listing the legal, "statutory" definitions of "feeblemindedness" in the 48 United States, with an understandable plea for greater conformity.

A symposium on the vocational rehabilition of the mentally retarded, edited by DiMichael(41), constitutes a special issue of the *American Journal of Mental Deficiency.* Out of the wealth of material in this journal, the following contributions may be pointed out in particular: a clinical and genetic study of microcephaly by Book, Schut, and Reed (42); cases of elective mutism by Morris(43); sex differences in the prevalence of mental deficiency by Malzberg(44); mental deficiency versus neurophrenia by Doll(45); and a review of the literature on cutis verticis gyrata with a report of seven new cases by Polan and Butterworth(46).

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NEUROSYPHILIS

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Bernard Dattner, who established the rational method of assessing the activity of central nervous system syphilis, died on August 11, 1952. He made careful cell counts and total protein determinations in spinal fluids of general paretic patients receiving Wagner Jauregg's fever therapy. By 1930 he had proved that these two, indicating the activity of syphilitic meningitis, reflected with reasonable accuracy the activity of central nervous system syphilis. His *Modern Therapie der Neurosyphilis* was published in Vienna in 1933.

Clinical manifestations are important, but permanently damaged brain tissue cannot be restored by killing spirochaetes. Clinical manifestations indicate active disease only when they are unquestionably progressing and are associated with an increase of cells and protein in the cerebrospinal fluid. After successful treatment the cells return to normal in 3 or 4 months and there is a more gradual improvement of the other quantitative tests of the cerebrospinal fluid.

The persistence of reagin in the cerebrospinal fluid years after treatment does not prove the disease active, though high reagin titres usually decline in the first year. Thomas(1) has followed the reagin content of blood and cerebrospinal fluid in 183 malaria-treated patients 5 to 14 years and 213 penicillin-treated patients 5 to 8 years. Reactivation of syphilis cannot be assumed when positive tests occur after negative or in positive cases when the titre fluctuates unless there is a significant rise which persists for several months. Persistently high titre in only one type of test, as occurred in 35% of the penicillin group, may be due to the complexity of antibody substances being tested, or in some persons inhibitory substances may interfere with demonstration of reagin more in some tests than in others. Kent(2) found sera, particularly those of syphilitic patients, contain substances inhibiting serologic reaction.

Wide fluctuations in the same reagin test, as occurred in 9% of Thomas' penicillin group, suggest that other factors than syphilis influence the test in known syphilitic patients as well as causing false positive reactions in nonsyphilitics.

Persistently high titre does not alone indicate the need for continued treatment. No patient had a relapse (increase of cells or protein) more than 2 years after treatment had inactivated the infection, even though high reagin titre persisted. The age of the patient was not a factor, but the shorter the duration of infection the higher the percentage of negative results. In general, cerebrospinal fluid reagins disappear sooner than those of the blood and are rarely influenced by the unknown factors that affect blood serum reagins. After 10 years, 70% of bloods were positive and only 28% of cerebrospinal fluids. Retreatment did not lower titres that had persisted more than 2 years after treatment. At the last examination only 6 patients had titres over 10.

Recording the results before and after 5 and 24 hours incubation of a spectrum of 7 different serum dilutions with saline, Kahn (3) has attempted to clarify our picture of the "false positive" reaction as a part of the "Universal Reaction." The latter is a lipid antigen-antibody precipitation reaction that has given positive results in all human beings and animals tested thus far. The serologic pattern differs in different human beings, but in the same person is constant during health. In the presence of pathological conditions it undergoes intensification after 2 weeks incubation; on recovery, it reverts to normal. In health, little or no precipitation occurs without incubation, slight precipitation occurs after 4 hours incubation and more after 24 hours. In syphilis, precipitation occurs without incubation and is almost the same with incubation. (The quantitative Kahn test corresponds to the 0.9 dilution observed without incubation.) The pattern is distinctive and hence probably lipid specific. In leprosy there is a distinctive but different pattern with greater response in the lesser dilutions. In malaria and tuberculosis there is a nonspecific response presumably an intensification of the response that occurs in normal sera.

In treponemal infections the serologic re-

action is clinically important because particular lipids are set free by the pathological process; the moderate activity of the disease produces a high level of antibodies at a continuous rate because of the chronicity of the disease and it happens that the reaction is optimal for the technique used. In contrast, in leprosy the disease is either minimal or excessive so that little antibody is formed and in malaria the conditions are not optimal; although the universal reaction becomes intensified after febrile attacks, the change may not affect the usual serodiagnostic range of dilutions.

The "Universal Reaction" has its common basis in tissue breakdown by normal catabolism or disease with the production of lipids which are foreign bodies and auto-antigenic as a result of chemical changes. Auto-antibodies are formed to the lipids and are detected in vitro by the "Universal Reaction." When these lipids are of such nature and concentration as to be detectable in the range of dilutions of the usual serodiagnostic procedures they cause a positive serodiagnostic reaction. In the absence of syphilis such "false positive" tests assume clinical significance.

A number of improvements have been suggested in the technique of the Treponemal Immobilization Test (TPI) to make it easier and more reliable(4-9).

Nelson(10) treated rabbits with doses of penicillin inadequate to cure syphilis. TPI and reagin fell to normal and the lymph nodes became noninfectious. After 2 months the TPI titre began to rise again and 3 months later the lymph nodes became infectious.

The TPI test is now being used for routine testing as well as for research. However, it must be emphasized that it is a delicate test and lacks reproducibility in most hands. Olansky(11) obtained less reproducible results before than after malaria in nonsyphilitic patients whom they were examining for false positive serologic tests.

By injecting rabbits and mice with killed Treponema, McLeod and Magnuson(12) have shown in one more way that the production of TPI antibodies is not accompanied by development of immunity.

In his book *Syphilitic Optic Atrophy,* Bruetsch(13) states that at present there are 23,000 to 50,000 cases of blindness in the United States due to syphilis. With clear photographs he substantiates his thesis that there is no "primary" optic atrophy in syphilis, nor is optic atrophy due to constriction of the optic nerves by arachnoiditis. Rather, optic atrophy is the end result of direct infection and inflammation of the optic nerve and chiasm causing destruction of nerve fibers, disappearance of myelin sheaths and connective tissue, and glial overgrowth.

Kennedy and Curtis(14) in a 4-8-year follow-up of 37 patients found 4 million units of penicillin effective in the treatment of optic atrophy, though larger amounts would be advisable. Malaria did not add enough to warrant its use. Treatment only arrests the disease process and conserves what remains of acuity or visual field. Besides confirming Moore's critical level of 20/70 visual acuity they found that if by campimetry one square inch of visual field remains, the patient is apt to retain vision; if less, there is apt to be progression to complete blindness. Increases in visual fields were not statistically valid unless of considerable magnitude.

The results of 4.8 to 6 million units of penicillin in Benton and Harris'(15) 23 patients roughly paralleled malaria. All but 3 of the 16 patients with vision less than 20/50 continued to deteriorate usually within $1\frac{1}{2}$ years.

Among 133 cases of optic neuropathy reported by Bagley(16), 23 cases were due to syphilis. One had Foster Kennedy syndrome. None showed any improvement.

Twice weekly, Oksala(17) examined the fundus of a boy whose interstitial keratitis was cleared by Cortisone and after 4 months he saw chorioretinitis develop. Interstitial keratitis is only part of a panophthalmitis.

Among 223 patients with interstitial keratitis and 71 with congenital syphilis without keratitis, Klauder and Meyer(18) found 42 with chorioretinitis. Retinitis pigmentosa occurred in 3 congenital syphilitics and was absent in acquired syphilis.

Drews *et al.*(19) emphasize the importance of Cortisone in the treatment of syphilitic interstitial keratitis citing cases that were not helped by penicillin. The effect of topical

Cortisone is a local one in the eye being treated. There was no resistance or intolerance and no ill effects from daily use of topical Cortisone for as long as 16 months. They stress the importance of checking family contacts to detect the process early when results of treatment are best.

The criteria for diagnosing Argyll Robertson pupils are reviewed by Benton(20) who quotes the frequency of occurrence of the various parts of the syndrome. He thinks the lesion is peripheral, at or beyond the ciliary ganglion.

Engeset, Eek, and Gilje(21) studied the X-ray changes in the long bones of 59 congenital syphilitics and found that the changes seemed to be due to disturbances in the growth rate and not a destructive inflammatory process of specific nature.

There have been 2 studies of spirochaeta pallida. One by Coutts and Coutts(22) demonstrated granules and cysts in human syphilitic chancres by dark field study. Another by Bradfield and Cater(23) reports an electron microscope study of flagella.

The continuing occupational hazard of syphilis is emphasized by Epstein(24) who reports 51 extra genital chancres among physicians.

Treatment.—The reports on antibiotics other than penicillin continue to be short term and with small numbers of patients.

Robinson and Robinson(25) report a 2-4-year follow-up. Fourteen cases treated with chloromycetin have negative blood and cerebrospinal fluid, 3 have positive blood, and 2 doubtful blood. Of 10 Aureomycin-treated patients, 5 negative blood and cerebrospinal fluid. Of 5 Terramycin-treated patients 3 have negative serology of blood and cerebrospinal fluid.

These medicines should replace penicillin only when there is some necessity, *e.g.*, penicillin sensitivity, and if the patient can be kept under close observation.

Because of the similarity of aggravating factors of rheumatoid arthritis and tabetic lightening pains, Moore(26) tried Cortisone in 5 tabetics who reported marked relief. The effect on gastric crises was doubtful and unpublished reports have failed to confirm the beneficial effect on lightening pains.

Summary.—Persistent clinical signs or positive serologic tests are not indications for further therapy. The cell count and protein changes of the spinal fluid are reliable signs.

The serologic tests for syphilis are one band of a broad spectrum of lipid antigen-antibody responses found in all animals, well or ill. Although Treponemal diseases cause the formation of lipids of the particular type and concentration optimal for this band, other conditions may overlap it and cause "false positive" tests.

The difficulty of reproducing results even with the improved TPI tests must be borne in mind.

Penicillin is the adequate treatment for optic atrophy.

Antibiotics other than penicillin should not be used for the treatment of syphilis unless there is some strong contraindication to the use of penicillin and the patient can be followed closely.

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ALCOHOLISM. GERIATRICS

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ALCOHOLISM

Disulfiram is the common name now approved by a committee on usage in the International Pharmacopeia for the drug tetraethylthiuramdisulfide (antabuse). Now that disulfiram has been in use 6 years, 5-year summaries have appeared in 2 Scandinavian countries. According to Martensen-Larsen (1), the method used in Denmark with 2,000 patients met with no fatalities and but one important contraindication—cardiac decompensation. He advises minimum doses and the use of a single small dose at any time in order to sober and calm an intoxicated patient. In a Finnish 5-year study(2) Leineberg reported good results in 191, or 36%, of 533 male patients treated with disulfiram. He considers it unfair to compare these results of outpatient therapy, a necessity for 90% of all patients, with the better ones attained in closed institutions. Both writers object to routinely advising complete abstinence and using it as a criterion for successful therapy; they allow for degrees of improvement, despite relapses. Leineberg decries clandestine use of disulfiram, claiming that some alcoholics now commonly use a 0.2% solution of aromatic tincture of iron to counteract its effects. On the other hand, Allen and Prout(3) in their 1953 review of alcoholism state that claims for ferrous chloride as a treatment of toxic disulfiram-alcohol reactions are unfounded, and no specific antidote has thus far been discovered.

Work of Swedish temperance boards includes use of commitment procedures and establishment of state boarding houses to permit disulfiram therapy, combined with medical and psychologic treatment. A Swiss worker notes that somatic injury to chronic alcoholics with use of the drug is 3 times greater in Switzerland than in Denmark.

In the U.S., a follow-up study by Hoff and McKeown(4) reports benefits in 78% of 560 volunteer patients treated by disulfiram in a Virginia medical college hospital service, as compared with benefits in 47.8% of 232 control patients. In both groups men did better than women.

Workers in 2 countries compare use of apomorphine with disulfiram. Follow-up reports by 2 Swiss physicians 17 months to 5 years after apomorphine treatment of 500 alcoholics showed cure in 31% and social recovery in 15%; second occurrences in 40%, occurring mostly in the first half year; and no precise information in 14%. In their experience apomorphine alone obtained as many cures as when combined with psychotherapy or disulfiram, but social recoveries increased with combined apomorphine and psychotherapy. These writers and others claim that apomorphine by restoring humoral balance and quieting anxiety has a biologic effect. British workers advocate use of disulfiram for the self-indulgent young drunkard and apomorphine for chronic addicts.

Almost all reports agree that disulfiram in competent hands is a valuable adjunct to therapy, but should be combined with psychotherapy and other activities.

One report concerned the difficulties resulting from increased alcoholism in France, where lack of treatment and posttreatment centers prevents adequate therapy.

Some workers continue to report at least temporary good effects with adrenocortical

therapy. One report claims greater sedative effect with ACE, more rapid symptomatic relief with ACTH, and both of help in reducing fever in delirium tremens. Use of ACE is advised in presence of cirrhosis in treating delirium tremens. Voegtlin(5), however, in a study of 40 patients found a course of adrenal steroids and ACTH of little except adjunctive use to other therapies. Temporary effects seen in 153 patients after use of ACTH were used as an approach to rehabilitative therapy. Findings in another study of initial low-normal eosinophil counts and subsequent declines in circulating eosinophils after injection of epinephrine in half of 157 hospitalized alcoholics confirm earlier results and do not indicate the presence of deficient adrenocortical function in alcoholics. Although final evaluation of the therapy awaits analysis of the complete follow-up program, a preliminary 7-month study of 94 California state hospital chronic alcoholics showed benefits in about a third of both the ACTH and the placebo treatment groups.

According to Williams(6), preliminary findings in the Harvard long-term, large scale controlled study of his genetotrophic concept of alcoholism confirm his animal experiments and indicate that nutritional supplements diminish craving for alcohol in human subjects. One study suggests that potential alcoholics have characteristic metabolic patterns "which would make it possible to identify and forewarn vulnerable individuals."

From their study of 500 alcohol addicts and other groups, Oltman and Friedman(7) find evidence regarding a specific metabolic disturbance in addicts still meager, but suggest a specificity in the transmission of certain biologic inadequacies from parent to child. Popham(8), however, denies a distinctive inherited metabolic pattern predisposing certain persons to alcohol; nor, in his opinion, has animal experimentation established specific preferences in rats for alcohol. He agrees with Wexberg that support for the genetotrophic theory requires follow-up studies showing a significant correlation between a premorbid metabolic type and alcoholism in large numbers of individuals.

Piotrowski and Abrahamsen(9) consider, from examination of 100 imprisoned sex offenders, of whom 58 were drunk at time of crime, that nonalcoholics committing crimes when drunk offer more hope for treatment than do chronic alcoholics who tend to commit offenses while drunk.

Three recent books(10) on forensic psychiatry include the medicolegal aspects of alcoholism, its association with criminality and criteria and use of tests in drunken driving. The content of various state programs is briefly discussed, as are problems of voluntary hospital admission and commitment for alcoholics.

A few investigators report failures in treatment as due in part to the therapist's own anxieties or overconcern for the patient.

Several states report progress with their programs. Georgia has set up a rehabilitation center near a state medical school, and Minnesota after a 2-year study has laid out its program. Appraisal of the 3-year Virginia program shows 57% of 816 patients helped to attain sobriety, 22% improved in their family relations, and 20% unimproved. In the 3-year operation of District of Columbia's program 519 of 1,075 registered volunteers and 196 of 380 court-referred patients were treated; of these, 30% were unimproved. New York City reports that of 11 general hospitals giving some treatment to alcoholics, only 3 earmark a total of 76 beds.

The Yale study(11) of college drinking behavior in 27 representative colleges concludes that college drinking follows the contemporary cultural pattern. About ¾ of both men and women drink to some extent, and the majority had drunk alcohol before college entrance; a fourth totally abstain. Some reports indicate an increase in juvenile alcoholism and other drug addiction.

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GERIATRICS

Statistics on old age accumulate almost as fast as the growing number of elderly persons. Gumpert(1) has pointed out that mass senescence is unprecedented, and therefore we have conditions and social effects never before seen. Mass senescence is as new as the atomic age in which it appears.

Analyses of U.S. life tables, 1940-49, showing significant decreases in mortality of older age groups except for white men aged 50 to 65, are reported by Lewis(2). In women the higher survival rates for all age groups rise to major degree after age 50. The added fact that $\frac{2}{3}$ of all persons over age 65 have an average income of less than $1,000 suggests that medical schools, hospitals, and other welfare institutions should begin to prepare for the fast-increasing load of elderly persons.

Comparing Cowdry's 3 editions of *Problems of Aging,* Gardner(3) emphasizes that research in biology and cellular aspects of aging has fallen far behind work in clinical, organic, sociologic, and related fields.

Different writers have emphasized the importance of longitudinal studies of personality development from childhood to old age, with greater emphasis on middle and old age. It has been pointed out that aging emphasizes limitations on the extent of activities in both sex and work, which are 2 important motivations. Much more study of family relationships in later age is also needed.

New techniques in the Donner Laboratory of Radiation Studies, University of California, for measuring and correlating certain physiologic and biochemical factors of aging include measuring the peripheral circulation during the entire life span. Studies in diet, metabolic handling of fat, thyroid function, and activity of hormones are contributing to further understanding of arteriosclerosis. One writer points out that the use of tracers adapted from atomic medicine to study these activities may prove equal in importance to the discovery of the microscope.

In studying the genetic aspects of senility Knoll(4) found in 114 patients whose paranoid conditions first appeared after age 40 a definite genealogic correlation with schizophrenia; *i.e.,* the latter occurred in 3.3% of parents of patients and in only 0.5% of the total population. Kallmann's(5) comparative studies of twins show the effect of genetic factors upon senescence. Whereas fraternal twins who have lived in the same environment often have different courses in senescence, identical twins raised in different environments often have the same types of disorders and pathologic conditions quite consistently at the same time in life and in the same manner.

The good results of electroshock therapy in many older emotionally disturbed patients are brought out by a number of writers. Three reports claim improvement with the use of oral metrazol. Swenson and Grimes(6) report subjective improvement in 25 mental hospital patients, although comparison with a control group showed no statistically significant differences. Jensen and Leiser(7) report moderate to marked improvement in half of 30 patients with cerebral arteriosclerosis; others continued to improve or continued to deteriorate. They conclude that oral metrazol is of value, has no contraindications, and is most efficacious on the more deteriorated patients. Fong(8) believes longer observation is needed to evaluate results of the therapy, which brought improvement in 16 of 35 psychotic patients with cerebral arteriosclerosis treated for 3 months.

Berkowitz(9), investigating the psychologic abilities in a male population of veterans aged 20 to 84 years with the Wechsler-Bellevue tests, concluded that decreases in psychologic functions and efficiency for ages 40 to 60 exceeded any decreases in the age group 60 to 80.

In an interesting paper Gumpert(1) con-

tends that it is possible to compensate for many losses in abilities due to old age. He points out that the most successful elderly persons have entirely accepted biologic insecurity and turn their work toward logic, wisdom, and other endeavors that do not require accurate memory recall.

Goldfarb(10) notes that the staff in homes for the aged must recognize their own fears of dependency, in order to handle troublesome patients. Rather than gratifying the patient's dependent needs or forcing him into withdrawal, the staff must find and put the patient's assets to use, while still giving him care and protection. Several writers stress the value of group occupational therapy, group psychotherapy, and training in self-care in geriatric ward psychiatry. Various writers emphasize that many of the psychoses in older persons commonly regarded as organic deterioration are functional in nature and respond to psychotherapy and the usual rehabilitation therapies.

As noted earlier, a number of reports concern the importance of social factors and the finding of new interests and part-time occupations for the well-being of older people. A study of 100 persons over age 65 in a midwestern community showed that married men were healthier than single men; and that adjustment and personality ratings correlated closely not with handicap score in hearing, vision, etc., but with earlier life patterns which later maturity had merely intensified.

Hall(11) advises corporations to encourage early planning for retirement. Observing retired executives, he found that those were best off who devoted considerable time to civic service and volunteer community work in which their skill, experience, and judgment were especially valuable.

There are the usual number of protests against arbitrary age retirement of professional workers. Pleas are made for tapering off, change to new work and semiretirement. A study of 1,502 teachers compulsorily retired from Chicago public schools and colleges indicated that suitable work was more crucial to happiness of men; pleasant club activities and friends, more important to women. A new book by Kubie and Landau(12) describes 9 years' experience at the Hodson Center, a recreational center for aged in New York City.

Writers continue to point out that men past 60 or even 70 can work profitably at certain jobs. Inter-industry stocktaking will help to provide job analyses and job descriptions suitable for older workers. These writers feel that unions should do more to look out for the older workers. Mrs. Hobby in an address to a Michigan conference on aging called attention to less absenteeism and fewer accidents in workers over age 50.

Indicative of economic and social pressures is the appearance of 2 recent articles on euthanasia. Both writers, however, feel that euthanasia entails grave risks to other than the dying person and must be rejected as a method of relief.

The report of the President's Commission on Health Needs of the Nation, released early last year, appealed for more home care of the aged and their admission to general hospitals for short-term care. A program of training and research in state mental health programs, issued in July 1953 by the council of state governments, made definite suggestions about care of the aged in the community. Recently Florida surveyed 2 cities whose census data had shown high concentrations of people above 60. The survey stressed the importance, for good health and happiness, of at least minimum financial security, a number of close friends and development of hobbies or interests.

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EPILEPSY

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In applying the term epilepsy to all cerebral seizures regardless of etiology, McNaughton(24) speaks for an ever increasing group of workers in this field(3) who conceive of epilepsy as a symptom not a disease entity. The classification he proposes for the epilepsies considers 3 factors: the clinical seizure pattern; cerebral localization, and etiology, often multiple. In a critical examination of commonly used terms, he concludes that epilepsy, etiology undetermined, is a more honest and challenging concept than "essential" or "idiopathic" epilepsy which suggests an etiological diagnosis has been made. Similarly, he proposes a more careful appraisal of minor seizures making full use of the contributions of electroencephalography and neurosurgery to our knowledge of cerebral localization. All minor seizures are no longer "petit mal"; this term now should be used in the more restricted sense.

The new edition of Holt and McIntosh's classic text book on diseases of childhood, now titled "Pediatrics"(17), carries a radical revision of the section on epilepsy, incorporating many of the advances in this field.

Pediatricians nodded knowingly at Lennox' conclusion that fever-activated epilepsy is usually outgrown(20), but sat up with a jerk when he found almost twice the proportion of epileptic relatives in the families of children whose convulsions occurred with fever as in those whose convulsions were afebrile. Disturbing also was the appreciable occurrence of brain damage in connection with febrile convulsions. Possibly the most stimulating contribution of this paper, however, is Lennox' provocative suggestion that when convulsions and fever co-exist, one or more of 6 situations may obtain, including the possibility that both the fever and the convulsions may be epileptic manifestations with or without infection.

In this year's lone pathological report dealing with nonfocal epilepsy(29), Watson reviews the literature on myoclonus epilepsy and presents an affected family as well as the findings obtained from pathological examination of one of its members. In this patient, the brain at autopsy showed diffuse neuronal lipidosis characteristic of cerebromacular degeneration. A brother still living presents a clinically similar picture. A second family, though certainly strongly affected by epilepsy, is less certainly classifiable as to pathology, and the patient described in greatest detail deviates in several essentials from the 2 patients belonging to the first family.

The exact role played by heredity is still not fully delineated. Alstrom(1) seems to speak for those who feel that it has no appreciable influence on the occurrence of epilepsy, and Lennox continues to add to his tremendous body of data on relatives and twins(19), which seems to support the concept that heredity definitely increases the possibility of epilepsy. Those who accept the evidence of electroencephalography will be greatly impressed by the identical appearance of the brain waves of one-egg twins, not only in regard to background rhythms but in respect to the seizure discharge configuration as well. The Seventh International Congress of Pediatrics, held recently in Havana, gave medical men the rare privilege of hearing these 2 points of view presented successively by their chief proponents.

The neurophysiological background for epileptic seizure patterns continues to be illuminated almost exclusively by the spotlight of electroencephalography. Clinical usefulness of this type of examination is becoming more widely appreciated especially in differential diagnosis, localization, and as a guide to treatment and prognosis. In this field a major contribution has been the publication of Volume Two of the Gibbs' *Atlas of Electroencephalography*(14). This volume deals with the electroencephalogram in epilepsy and is a fit companion for Volume One which treats normal control electroencephalograms. Probably no one working in clinical electroencephalography escapes the necessity of referring occasionally to the Gibbs' Atlas in connection with the interpretation of sleep tracings in children. Chapter 13, titled "Thalamic and Hypothalamic Epilepsy," and Mulder's paper(23) are of special interest to those interested in the differ-

ential diagnosis of psychiatric symptoms. The Gibbses have suggested that the examination can be a prognostic guide in epileptic children whose symptoms are associated with occipital or mid-temporal spike focii(13). Such children tend to recover from their seizures and their electroencephalograms turn toward normal by adolescence.

In a comprehensive survey of the psychological and social aspects of epilepsy, Lennox and Markham(21) make a bid for the attention of a large segment of this country's physicians through the medium of their paper in the *Journal of the American Medical Association.* This presentation contains so much meat that space does not permit an adequate summary here. It is sufficient to say that this paper should be thoughtfully perused by every physician who treats epileptic patients. Ruskin(27) makes a worthy contribution in the field of medico-legal aspects of epilepsy.

Because of the continuing discovery of new antiepileptic drugs, a number of treatment articles may be expected each year(10, 18). The majority of papers present an increased emphasis on the treatment of the entire patient with stress on his emotional and vocational rehabilitation as an essential facet of successful therapy. Such an article by this reviewer attempts to cover the points emphasized above(10). The happy results of intensive psychotherapy in the treatment of 3 epileptic children were reported in detail by Gottschalk(16). Bickford's(6) patients who apparently deliberately induce epileptic seizures in themselves present a psychological enigma.

Regarding reports on the use of the newer medicines, those on Mysoline(12, 15) deserve attention, not because this drug promises to replace phenobarbital or Dilantin as anticonvulsants, but because unlike Mesantoin and Phenurone or the short-lived Thiantoin, it has thus far not exhibited toxic characteristics and has proven effective in many patients not relieved by Dilantin and phenobarbital. Milontin(22, 30) and Diamox(5) are reported to be useful in patients displaying the spike wave complexes in the electroencephalogram. Doyle(11) publishes contrary results in a small group of patients treated with Milontin. In neither drug have the therapeutic benefits consistently bettered those of Tridione but, aside from occasional incidence of nonprogressive urinary tract irritation with Milontin(22), both drugs have been gratifyingly nontoxic. Stamps (28) on the basis of wide experience with Themisone, has reported especially favorable results in the treatment of psychomotor seizures, although a 6% incidence of bone marrow depression and the need for using large doses are disadvantages that may somewhat diminish general enthusiasm for this drug. Malidone a homologue of Tridione is reported superior in its therapeutic effects and less toxic(7).

Surgical removal of non-neoplastic epileptogenic lesions offers the prospect of relief to severely handicapped epileptics in whom medical treatment has failed and in whom there is a discrete electrical focus in a surgically approachable area. In psychomotor epilepsy where a temporal lobe focus can often be demonstrated, either limited cortical excision under electrographic control or amputation of the anterior one-third of the temporal lobe tip may be performed(4, 25). Hemispherectomy in hemiplegic children with uncontrolled seizures is being done with increasing frequency and some very encouraging results, not only in regard to the seizures, but also on the general effectiveness of these children(8, 9, 25).

Despite such local setbacks as the recent ill-advised and discriminatory legislation in Delaware making epilepsy reportable, public enlightenment is increasing through medically inspired articles in the press and medical information programs over radio and television. Seminars on epilepsy have been organized in many parts of the country for ancillary medical services. The entry of public health agencies into the field in Maryland is told by Baldwin's summary of two years' experience(2).

The few articles that have appeared in popular magazines, for example, "We Learned to Live with Epilepsy" in *Parents' Magazine,* January 1953, "They're Beating the Devil Out of Epilepsy" in the *Reader's Digest,* January 1953, and "No Wonder Epileptics Are Bitter" in the *Saturday Evening Post,* March 28, 1953, produced a deluge of thousands of letters inquiring mainly about

treatment facilities. This deluge inundated the asthenic National Epilepsy League headquarters in Chicago and gave eloquent evidence of the urgency and magnitude of the problem. Presumably stigmatization and guilt have largely prevented interested lay people from organizing and joining forces to better the lot of the epileptic as similar groups have done for the infantile paralysis victims for example.

Epilepsy continues to be more than a medical problem.

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MENTAL HEALTH IN EDUCATION

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Five major goals for mental health education were developed this past year by the Michigan Department of Public Health on the basis of replies from 64 experts in the field: (1) to disseminate knowledge and develop understanding of the underlying principles of mental health; (2) promote the development and maintenance of good mental health in children; (3) create informed public interest in the problem of mental illness; (4) develop the community aspects of the mental-health program; (5) promote training of personnel. With respect to the second of these goals the report specified: Train teachers and school administrators in child development theory, in the elements of the psychology of adjustment necessary to recognize children with problems, and in developing the ability to maintain a mentally healthy classroom atmosphere; promote screening of personnel in an attempt to assure well-adjusted teachers; develop mental-health curricula in school systems to help children make satisfactory adjustments, and in general adjust school practices to children's emotional needs; develop mental-health literature appropriate for school children of all ages(1).

In the same issue of *Mental Hygiene,* containing this statement of goals, Peter Blos emphasizes the interaction between the educative process and the principles of mental

health. He points out that a significant part of childhood's destiny lies in the hands of its teachers; that a reasonably stable relationship between teacher and child is essential for the maintenance of self-respect; and the fact that children experience emotions in relation to learning and school life should be recognized and made part of the learning experience.

Lawrence K. Frank, former director of the Caroline Zachry Institute, has recently summed up the modern viewpoint of education and its mental health possibilities as follows: "Basic to children's learning is a conviction that with understanding, affectional guidance, they can and will develop into healthy personalities with a feeling of worth and dignity(2). The final report of the Midcentury White House Conference on Children and Youth, made available early in 1953, notes the change from the traditional concept of "learning" to one concerned with mental hygiene, involving better understanding of the "wholeness of the person—physical, emotional, social, intellectual, spiritual," and a new conception of the integration of the personality(3).

Helping teachers and school administrators "improve the school life of the child from the point of view of its usefulness to him in developing his mental health" was the purpose of the Detroit School Mental-Health Project, which recently completed 5 years' work.(4). The project was extensive rather than intensive; its goal, the official report says, was to reach as many as possible of the 10,000 teachers in 600 schools in the Detroit metropolitan area, rather than to concentrate on the staffs of 1 or 2 schools. More than 2,800 teachers took the beginning 2-hour credit course in education for mental health, and 558 of these took a second and advanced course. As many as 3,860 teachers attended shorter institutes on the subject, and approximately 5,000, in connection with their teachers' meetings, heard a series of 4 radio programs addressed specifically to them. Some of the by-products of the project were: fewer looked upon mental illness with fear and hopelessness; there was greater readiness to use the services of the psychiatrist and psychiatric social worker; and more attention was paid to education for family living. "We are ourselves convinced," say those in charge, "that many teachers involved in this program are living and teaching more than before in accordance with the principles of mental health. Teachers have more self-respect, attend more to children, are more humane, are more considerate with their pupils, conduct themselves in such a way that pupils are able better to attend to their basic needs, [moreover] there appears to be more widespread concern about mental health, not only in the schools but in the community. School people are more conscious of the need for visiting teachers, child-guidance centers, and other resources in the school system and the community as a whole."

How to get better understanding of mental health in the classroom was the subject of discussion in a number of workshops during the year. "The Teacher and the Road to Mental Health" was the theme of the University of Oklahoma workshop in July. Topics included: development of healthy family relations for the "preschooler" and the impact of school experience on him; organizing the curriculum for maximum personal and social development of the child; disciplinary problems and good mental health-principles; the mental health of teachers; using state resources and developing statewide programs for mental-health improvement in the schools(5). A Massachusetts workshop in mental health grew out of a common interest on the part of representatives of State Departments of Education and Public and Mental Health. It gave particular attention to the emotional needs of children, parent-teacher relationships, and the role of guidance in teaching. The major benefit of the workshop, it was found, was not so much the increase of fundamental knowledge as "the improvement of attitudes through experiencing democratic participation which fostered growth and lessened tension"(6).

Consultation service to public schools by a "mental health team" is a plan experimented with at the Mental Health Center in Phoenix, Arizona, where 5 disciplines—psychology, clinical psychology, psychiatric social work, mental health nursing, and social-science research—were all utilized, with the psychologist serving as the chief liaison between the Center and the school with which the

team worked(7). Only moderate gains were claimed, but the fact that the school welcomed the service was felt to be important, and there was general agreement that the team method leads to a mutual learning experience for both the Center staff and for the school personnel, with resulting better services for the children.

That private and public schools alike have become much concerned with mental health is indicated by a significant leaflet, distributed by the National Council of Independent Schools, entitled "Some Inquiries Helpful in Appraising Mental Health in a School"(8). Typical questions were: What kind of respect is accorded the learnings that come by way of activities? Do the children have a sense of belonging, each one to something in which he is a responsible participant? Does the routine that cares for behavior of individuals within the classroom or within the school take into account that behavior is much more than contribution or infraction; that behavior is evidence of what a pupil is inside, and where he is emotionally and on the ladder of growth and learning?

The flow of helpful, nontechnical books and pamphlets for parents, children, and youth continues unabated(9, 10). Especially timely is a recent publications on films for use in psychiatry, psychology, and mental health prepared by the Medical Audio-visual Institute of the Association of American Medical Colleges. It includes 51 critical reviews of films in this area(11).

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PSYCHIATRY IN INDUSTRY

F. W. DERSHIMER, M.D.

Henry A. Davidson(1) writing about "Psychiatry and Euphemistic Delusion" points out that delusions fool nobody for any length of time. He writes:

> If we improve the operation, we do not need to sweeten the word. And if we fail to improve the operation, it is a futile bit of word play to invent a new term. The true meaning always wears through the verbal varnish.

It would be euphemistic to claim that psychiatry is making general progress in industry. The actual situation seems to be this: Quite a few medical directors and other members of management have become seriously interested in the use of psychiatry. They recognize costly psychiatric problems in their own industries. They want help in solving them. They have authority to hire it.

But, in accord with usual industrial practice, they have been observing psychiatric "operations" and its products. They are observing the results of psychiatric treatment on fellow employees, relatives, friends, and themselves.

When they thus scrape through the "verbal varnish" of psychiatric sales literature, they develop grave doubts as to whether they can safely use the product to advantage.

This refusal to buy the present usual psychiatric product may be a beneficial act. It may prove, in the course of time, to have preserved an opportunity for psychiatry such as we had, and lost, after World War I.

Many industrialists appear to be in agreement with Judd Marmor(2) in his paper on the god complex as an occupational hazard of psychotherapists. As Marmor writes, one prominent attribute of psychotherapists is

their refusal to learn. In response to a basic state of insecurity, they strive, instead, to appear omniscient.

In industry, we observe evidence of this attribute so often that we are in danger of condemning all practicing psychiatrists for it. Like some other practicing physicians, psychiatrists too seldom call upon the industrial physician for available information about either their patients or the mores of industry. In some cases, they make obvious efforts to avoid or circumvent the industrial physician. Such behavior does not improve the reputation of psychiatrists.

A common example is seen, over and over. The self-diagnosis of the patient is accepted when he attributes his disturbance to his job or other working conditions. He is removed from work for rest and psychotherapy. Months later he is returned as "cured" but with the recommendation to management that he be given a different kind of job.

In these cases, most industrial physicians can and gladly will supply accurate and important histories, if queried before the unrealistic diagnosis has been made and treatment prescribed. And this is the only time it can be useful to the psychiatrist and his patient.

It is a pleasure to report that a few practicing psychiatrists are taking advantage of this opportunity. They are learning, as a result, to avoid misleading their patients about the realities of the business world. Psychiatric patients mislead themselves too readily. They are not cured by supporting their delusions.

Business is motivated by self-interest. Its mores are based on this. When business leaders like Crawford Greenewalt and Benjamin Fairless frankly support the *intelligent* application of this motivation, they do more, in my opinion, to promote mental health than do many psychiatrists.

They bring the problem down to reality. They eliminate the need for miracles, for panaceas, for a philosopher's stone with which to transmute the allegedly base metal of human nature into the alleged gold of something better.

They define, at least by implication, our problem in human terms. Our first and great problem in psychiatry is not to make men over, not to eliminate self-interest, but to cure and prevent the mental disease which interferes with *promoting self-interest intelligently.*

Lasting progress, in or out of industry, depends upon our progress in solving this great problem. Industrialists who criticize our "operations" are trying to help us advance our own self-interest intelligently.

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PSYCHIATRIC NURSING

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A review of activities in psychiatric nursing during the year indicates that official nursing organizations are progressing with their plans to "meet the nursing needs of the mentally ill"(1).

A Coordinating Council of the American Nursing Association and the National League for Nursing called a special meeting of representatives of other organizations, interested in the welfare of the mentally ill, to consider the means by which organized nursing "can move in a concerted manner" (2) to accomplish its objectives.

The committee included representatives from The American Psychiatric Association; the Group for the Advancement of Psychiatry; the National Association for Mental Health; the Committee on Mental Health of the American Medical Association; the American Hospital Association; the U. S. Public Health Service; Veterans Administration; the National Federation of Licensed Practical Nurses; the Planning Council Working toward National Organization for Psychiatric Aides; and others, in addition to members from the nursing organizations.

They met in New York City for 2 days in April 1953 and from their deliberations came increased understanding of the problems involved and concurrence in recommending progressive action. With the exception of the 2 members representing the psychiatric aides, the group recommended, "That nursing assume the leadership and responsibility for the training of all nursing personnel rendering care to psychiatric patients and to look to The American Psychiatric Association and other professional psychiatric groups for critical evaluation and psychiatric concepts that should be used in providing nursing care and training for that care"(3).

Additional recommendations approved by the coordinating council included provision for continuing study of "progression in nursing education and from practical nursing and psychiatric aides training into professional nursing"(4) and for continuation of the committee and other items.

At The American Psychiatric Association's annual meeting(5) in Los Angeles, May 4 to 8, the number of nurses present and participating in sessions concerned with psychiatric nursing was gratifying.

An overflow attendance participated in a round-table panel discussion of the topic "Interpreting the Functions of Nursing Services in Psychiatric Hospitals to the Public." Members of the panel presented their viewpoints interestingly and audience participation was lively.

At the National League for Nursing biennial convention held in Cleveland, Ohio, in June, Dr. Bernard H. Hall addressed a large audience of members of the American Nursing Association and the National League for Nursing. His subject was "A Colleague Looks at Psychiatric Nursing"(6). A panel of nurses discussed the presentation and comments from the audience attested to the interest the topic aroused.

From the states come items indicating progress in education of personnel caring for patients in mental hospitals. New York State Department of Mental Hygiene continues to provide leadership in nursing education. Nine of the basic nursing schools(7) conducted by the department are approved for temporary accreditation by the Accrediting Service of the National League for Nursing.

Eight collegiate institutions(8) in New York State are offering programs in arts and sciences to student nurses enrolled in the basic schools of nursing conducted by the New York State Department of Mental Hygiene. Approximately 200 students are currently enrolled. They will earn credits for their work in the colleges and learn the nursing arts at the home hospital.

Practical aspects of psychiatric nursing are well presented by Dorothy Clark(9), Assistant Director of Nursing Services, California Department of Mental Hygiene, in an article entitled, "The Little Things Do Count." She states that because these "little things" make the difference between custodial and therapeutic care, they are the essentials in the nursing care of mentally ill patients. Among the items mentioned is the importance of appearance. The kind of clothing provided, its care, and appropriateness influence patient behavior.

A subcommittee on clothing for mental patients(10) established by The American Psychiatric Association, Mental Hospital Services, has devoted its effort to promote improvement in the kind of clothing provided for patients in mental hospitals. Miss Annie Hall, Director of Nursing for the Virginia State Hospital System, was appointed chairman. She was succeeded later by Miss Helen Edgar, Director of Nursing at the Philadelphia State Hospital. One achievement of the committee was an interesting exhibit of clothing which was on display at the Mental Hospital Institute, Little Rock, Arkansas. The garments were made of nylon-orlon fabrics and had been tested in State and Veterans Hospitals. Interest in the exhibit and participation in the session devoted to clothing indicate that the topic is considered important to those concerned with patient care.

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OCCUPATIONAL THERAPY

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Outstanding in organizational development is the completion of the constitution for the World Federation of Occupational Therapists(1, 2). The American Occupational Therapy Association has been accepted as a member in the World Federation. In the U. S. there are 27 individual members, 8 individual subscribers, and 1 contributing member as reported in October 1953(3).

Attempts to define applications of occupational therapy to specific problems are increasing in number and excellence. Condon (4) gives a valuable study of the management of the manic-depressive, pointing out that manic patients may be calmed by quiet repetitive activities. Slow, careful brushing on of paint; making small mats rather than a large table cloth; weaving simple patterns are emphasized. The constant facing of reality; making reality attractive by showing constructive ways to get attention; protection from ruining the project by impulsiveness; planning to avoid the cycle of failure, loss of self-esteem, and grandiosity are also stressed, and ways of achieving these goals illustrated. Depressed patients must have tasks assigned since their low initiative keeps them from choosing. Menial, monotonous tasks help to assuage guilt feelings. Depressed patients, given good materials, may feel more guilty and spoil the task to prove unworthiness. Reassurance in simple tasks helps the patient to avoid destructive tendencies. As improvement takes place the patient becomes more aggressive; this is a signal for closer supervision to prevent suicidal attempts. Dangerous tools should be avoided. Direct compliments are omitted. The task is to be guided by "kind firmness." Tolerance of postshock confusion is aided by guidance and reassurance. Useful tasks should always be chosen. The examples and discussion are excellent.

Hossack(5) recommends for alcoholics revival of former interests or stimulation of new ones. Considerations of locale (urban or rural), type of residence, financial status, domestic situation, etc., play a role. A 3-week period of care within the institution leads to a follow-up program for 1 year. Clubs are encouraged. Hossack finds that the average alcoholic in a private institution shows little interest in manual skills or cultural pursuits and suggests that longer hospital residence might help.

As part of a discussion of hearing impairments(6, 7, 8, 9), Ness presents techniques for gaining the attention of the deaf person; ways to facilitate the use of lip reading or a hearing aid; methods of instruction; and emphasizes the need for safety and protective devices. Activities not dependent upon the auditory sense are chosen; most crafts can be used. Bibliographic material chosen from well-illustrated pictorial magazines and "best-seller" fiction is well accepted. Interpersonal relationships contingent upon interviewing, introduction, conversation, or general socialization are recommended.

Techniques and special problems are discussed as applied to the aphasic child(10); the cerebral palsied(11, 12); hemiplegics (13); the chronically ill(14); disturbed children(15); geriatric patients(16); and paraplegics(17).

Kurland and Krawiec(18) report on the use of drama in psychotherapy in a state hospital. They indicate that the activity ranges from soliloquy on an empty stage to the use of elaborate props with the whole literature of the drama. The opportunities provided for socializing and bringing about a psychological awareness are limited only by the ingenuity of the director of the group.

Friedman(19) offers the following sug-

gested procedures for the use of art in therapy: (1) organization of the program to formulate a work plan applicable to the emotional and intellectual needs, (2) aid in developing an appreciation of art forms as related to daily activity; and (3) establishment of normal work tolerance and acceptable attention span. He advises an atmosphere of ease and informality; discussion of art in relation to the patient's experiences; exploration of latent talents and skills, and little academic teaching. The aims and objectives should include emphasis on appropriateness and the development of aesthetic judgment. The attitudes of the therapist should never convey an air of tolerance or of resignation. There is some discussion of the choice of materials.

New schools for training occupational therapists are urgently needed in Canada (20). President Campbell of the Canadian Association for Occupational Therapy recommends undergraduate and graduate medical training in rehabilitation, establishment of professorial chairs in universities, provision of adequate training facilities, and the granting of degrees in rehabilitation medicine. He believes all nurses should be educated in the subject by proper provision in the nursing curricula and that a vigorous recruiting program be started. He holds that the term "rehabilitation" is more completely inclusive of the needs of the handicapped person and should replace the term "physical medicine."

The A. O. T. A. is again to be commended for its excellent Buyers' Guide(21).

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PSYCHIATRIC SOCIAL WORK

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Research.—One of the criticisms of psychiatric social work has been lack of research. Most of the literature has been descriptions of practice or sharing of experiences. This year, however, research has come into its own. The April issue of the *Journal of the American Association of Psychiatric Social Work* contains 3 significant papers on this subject—Method of Social Work Research in Schizophrenia(1), Psychiatric Case Work Interviewing as a Research Method in the Human Relations Field(2), and Some Essentials in the Evaluation of Social Case Work(3).

Administration of a group research program for student social workers(4) is another contribution in this field.

All of these articles suggest methods and possibilities for further research along similar lines.

The findings of a most comprehensive piece of research yet undertaken in the field of psychiatric social work, a study that has been in preparation for some years, were also released this year with the publication of Berkman's *Practice of Social Workers in Psychiatric Hospitals and Clinics*(5). We have for the first time a comprehensive picture of psychiatric social workers, their location, and responsibilities. This study under a grant from the National Institute for Mental Health, was made primarily to secure data that would facilitate planning for professional education in this field; it has long been realized that teaching in any profession must be closely related to practice if the student is to be adequately equipped. The study provides ample material for an evaluation of professional education in terms of present practice of social workers in psychiatric setings. The need for the extension of present professional training facilities is brought forcefully to our attention by the fact that 55% of the social workers in psychiatric hospitals and 14% of those in psychiatric clinics do not have professional training. But this ambitious piece of research brings to light many other important implications for the field. One of these is the fact that 2% of the psychiatric social workers reported that they were involved in research studies of various kinds, frequently in collaboration with other members of the psychiatric team. Since research is essential in the development and improvement of any professional field, it would seem that psychiatric social workers are assuming responsibility for testing and evaluating social case work to a greater extent than has been recognized.

Another interesting fact brought out by the study is the need for program planning for social workers in psychiatric settings. There seems to be a decided tendency to allocate the social worker to special services rather than to recognize his unique contribution in the total treatment plan in collaboration with other disciplines. With the shortage of personnel the use of his specific skills in dealing with patients is an important consideration for both psychiatrists and social service administrators. On the basis of the factual data provided by this study next steps are evident and both sound and progressive developments for the field of psychiatric social work can be expected.

Other Developments.—That social workers are taking their teaching responsibilities with allied disciplines seriously and that increasing use of these services is being made is evident from various articles on the teaching of medical and nursing students(6, 7, 8, 9). While psychiatric social workers have worked extensively with alcoholics, little has been written on the subject, perhaps because of the seeming lack of encouraging results. It is therefore gratifying to see that there is beginning a sharing of experiences in this field, as shown in the article, "The Social Worker and the Alcoholics Anonymous Program in a State Hospital"(10).

Although there has been little written this year on the family care of mental patients, there is increasing interest evident from seminars on this subject in various parts of the country, the proceedings of which are not yet available.

This has been a year when past progress has been particularly evident and sound planning for future developments has been made possible.

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OUTPATIENT PSYCHIATRY AND FAMILY CARE

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Since appropriations became available under the National Mental Health Act in 1947, 457 new mental hygiene clinics have been established in the United States. According to Curran(1) one half of the 1,228 clinics, now operating, are in communities with fewer than 100,000 population. In the smaller communities, as well as in the larger, the demand for psychiatric services far exceeds the supply of trained personnel available to staff the needed clinics. The professional requirements for psychiatrists, social workers, psychologists, and public health nurses working in semirural areas must be as high as in urban centers because of the many demands for their services beyond individual treatment of clinic patients.

Koren and Joyal(2) believe that clinic patients should be charged a fee, even though nominal, for without some sacrifice by the patient treatment becomes more difficult and progress slower. Infantile dependency reactions are perpetuated when fees are not charged. Attitudes toward fees may be sensitive clues to the dynamics operating in patients.

The psychotherapy of major mental illness is now being undertaken in outpatient clinics as illustrated by the report of Beck(3) who describes a favorable outcome in a patient with schizophrenic reaction who had been sick for 7 years. The patient was seen in the clinic for an hour a week.

In order to stimulate positive changes in the mental health of a community, Maholick (4) believes the clinic should provide help for teachers in schools and colleges. Counselling and consultative services were provided also to other social agencies.

For many years, child guidance and mental hygiene clinics have been under severe pressure from case loads greater than the staff's strength to meet them. In the interests of doing careful, high quality work, most clinics have devised waiting lists for all but emergencies. Morris and Soroker(5) interviewed 72 persons by telephone who had been on a clinic waiting list several weeks to 6 months. Exactly one half of the persons interviewed felt they no longer had the problems for which they had sought help. Most had cleared without outside assistance. The other patients still had their troubles but were discouraged by the long waiting period.

Dr. Warren(6) and his group sought to determine the adequacy of outpatient treatment given psychiatrically disabled veterans in Arizona. Five hundred patients were seen in a 3-year period once or oftener by the mental hygiene clinic; 100 were being treated on a fee basis elsewhere. On these, 36% were being treated by general practitioners, 39% by physicians practicing chiefly in psychiatry, and 25% by Board certified psychiatrists. Thirty patients, selected at random from the mental hygiene clinics, and a similar number from those treated by "fee-basis physicians," and 30 veterans receiving no treatment, were compared. All had psychoneurotic disorders. The average length of treatment was as follows: 33 months for fee-basis veterans, and 8.9 months for clinic patients; relative improvement in the 3 groups is shown in Table 1.

TABLE 1

RELATIVE EFFECTIVENESS OF METHOD

	Significantly Improved %	Slightly Improved %	Unchanged %	Worse %
Fee Basis Veterans.	0	20	10	70
Mental Hygiene Clinic Patients...	13	53	27	7
Controls	0	23	10	66

After speculation on the findings, the authors conclude that the team approach in the mental hygiene clinics and resources available to them may account for the better results.

FAMILY CARE

The slow growth in the use of family care continues. (See table on page 534.)

During the year 1952, 305 patients from 24 Veterans Administration Mental hospitals were placed under the foster home plan as reported by Cummings(7); 67 of the 305 patients placed were discharged from foster home care, 31 were transferred to the usual trial visit with relatives, 24 had to be re-

turned to the hospital. Sixty-six percent of the patients placed in family care had been ill for 5 years or over.

It is estimated that there was a saving to the taxpayers of some $500,000 through this operation in the Veterans Administration. One of the most tangible values, of course, was the release of beds for others on the waiting list. Cummings felt that improved health and behavior resulted in the patients placed in foster homes.

PATIENTS IN FAMILY CARE IN THE UNITED STATES

June 30, 1953

New York	2,317
Michigan	1,188
Illinois	768
California	627
Ohio	330
Maryland	272
Massachusetts	257
Veterans Administration	183*
Rhode Island	183
Connecticut	60
North Carolina	16*
Total 1953	*6,201*
1952	*5,617*
1951	*4,937*

* These reports covered an earlier 12 months' period than 30 June 1953.

Crutcher(8) reports that 165 continued-treatment patients were placed in family care last year in New York State. An increasing number of low-grade children from the Rome State School have been placed in good homes under resourceful caretakers. She notes the following trends in family care: (1) More work is being done with the patient's family to help them understand his problems. (2) More is being done to help the patient understand his family's attitudes. (3) Group meetings with caretakers have helped them accept the patient, his goals, and his limitations. (4) Caretakers visit patients who have had to be returned to hospital to maintain contact and the expectation of replacement. (5) Occupational therapists are helping caretakers plan activities for patients in the family care home and in community recreation. (Margaret Platner of the Illinois Department of Public Welfare stresses this point also.) (6) Patients are not brought back to the hospital if they can be helped in the community. (7) There is greater need for homes in cities and suburbs close to community resources for work and training.

Main(9) reports that Ohio has 10 patients coming to an institution 5 mornings a week for day care. They return home to their families at night. Yerbury(10) indicated that Connecticut is discharging patients over 65 years old eligible for Old Age Assistance benefits. These selected patients are placed in convalescent hospitals where the cost is borne by the State. Kettle(11) of Norwich (Connecticut) State Hospital has 100 patients so placed. Only 13% had to be returned to the hospital for further medical or psychiatric treatment. Regan(12) reports that the Rhode Island State Hospital discharged 198 patients from family care last year. California called to the attention of its Legislature the savings in the use of family care; it costs less to support a patient under this plan than in the hospital.

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ADMINISTRATIVE AND FORENSIC PSYCHIATRY

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Interest in administrative psychiatry, judging by the number of articles appearing during the past year, is on the increase.

David Rioch and Staton(1) discuss milieu therapy, with particular emphasis on the development of hospital groups as a contribution to therapy. Adland(2), basing his article on a study conducted in a small private mental hospital, considers the problems of administrative psychotherapy and the importance of the resolution of diversities of opinion between therapist and administrator. Freeman and Schwartz(3) describe what they term a motivation centre in which the efforts of various types of hospital personnel are concentrated on regressed patients. Baganz(4) presents the results of a questionnaire study directed to hospital administrators, and emphasizes the need of certification of mental hospital administrators—a project now well under way by a special committee of The American Psychiatric Association. Cameron(5) emphasizes the importance of the Central Inspection Board in bringing about higher standards in mental hospitals, and Blain(6) discusses recent trends in organized psychiatry. Gottlieb(7) states that the responsibility that the administrator is willing to assume has much to do with the success of research activities being integrated into the total function of the hospital. Kaufman(8) cites illustrative cases in discussing the rôle of the psychiatrist in the general hospital.

Dunham(9) points out the need of careful epidemiological studies in assessing the value of preventive programs. Goldhamer and Marshall(10) study a century of mental hospital admission rates in Massachusetts and arrive at the conclusion that in that whole period the rates for the age groups 20 to 50 years inclusive have shown no substantial change.

Maclean(11) points out a trend toward simplification in the regulations and laws governing admissions to mental hospitals. Sclare(12), a British psychiatrist, makes some interesting observations on the mental patient in America. Finally, mention should be made of the fact that the number of the *Annals of the American Academy of Political and Social Science* for March 1953 (vol. 286) is devoted to the topic of Mental Health in the United States. The article by Barton (p. 107) on hospital services for the mentally ill has particular reference to some administrative problems.

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FORENSIC PSYCHIATRY

During the year considerable attention has been focussed on the relations of mental disorder to responsibility and punishability for offenses. Two articles(1) discuss phases of the Straffen case, a British trial which stirred up much comment on both sides of the Atlantic. One of the notes(2) points out that the M'Naghten Rules "recognize a lack of criminal responsibility for a much more restricted sphere than any other European legal system." Warner(3) makes a none too strong defense of the status quo in a Pennsylvania case in which a moron was allowed to plead guilty to first degree murder. Waelder(4), in discussing the problem of responsibility, advocates consideration of the 3 criteria of dangerousness, deterrability, and treatability of the offender determining disposition. An unsigned note(5) criticizes the

majority opinion of the Supreme Court whereby an Oregon law placing the burden of proof of insanity was upheld—a decision from which Mr. Justice Frankfurter dissented in his usual clear and forceful way. Cruvant and Waldrop(6) present an interesting study of the murderer in the mental institution. Of over 32,000 admissions to Saint Elizabeths Hospital they found only 81 accused of homicide, and conclude that there is no such psychiatric entity as the "insane killer." Smith(7) presents a strong argument for the concept of partial responsibility. Daumezon and Paumelle(8) describe a case of a 57-year-old obsessional woman who, after a topectomy, showed violence toward her mother and had to be committed. By far the most important pronouncement in the field of responsibility is found in the British Royal Commission on Capital Punishment, the report of its four year's deliberation has just appeared(9). The Commission would prefer abolishing all "tests," but agree that if any are to be used, the M'Naghten Rules are indaqeuate and should be supplemented by a further provision that the accused was "incapable of preventing himself from committing" the act. Further, the Commission recommends that every person charged with murder be mentally examined before trial—the principle of the Briggs Law of Massachusetts. These recommendations have been acclaimed by the *Lancet*(10) and *British Medical Journal*(11).

Several articles have discussed evidence. Reese and Hodgson(12), for example, consider the psychiatrist in court. Griffin(13), on the same subject, urges the establishment by the courts of clear criteria of "expertness." A note in the *Harvard Law Review* (14) considers psychiatric assistance in the determination of testamentary capacity, with some sound recommendations for improvement. The views of the lawyer are well stated in an article by Viscount Simon(15). A thorough discussion of drug-induced revelation and criminal investigation is presented by Dession and Redlich(16) and associates of the Yale Law and Medical Schools. A note in the *Northwestern Law Review*(17) considers a recent case in Illinois in which confidential communications to a psychiatrist were held privileged in the absence of a statute.

The law of sexual sterilization in Pennsylvania is considered by Challener(18). A few articles on commitment may be mentioned. Branch(19) reports the new Utah law—modeled on the Draft Act prepared by the National Institute of Mental Health—to be efficient and workable. A note in the *Virginia Law Review*(20) criticizes the decision of the United States Court of Appeals in holding that the United States has no right to detain "permanently insane" persons charged with crime.

A growing interest in the subject is revealed by the new books. A recent issue of the *Ohio State Law Journal*(21), for instance, is devoted to Law and Psychology. Father Pickett of Ottawa has written a volume *Mental Affliction and Church Law*(22). Dr. L. H. Cohen's(23) *Murder, Madness and the Law,* Neustatter's(24) *Psychological Disorder and Crime,* and Overholser's(25) *The Psychiatrist and the Law* may also be mentioned.

Most of the state legislatures were in session during the year, with the usual copious output of new laws—a few provisions may be noted.

Colorado(26) follows the lead of New York and New Jersey in making certain enumerated sex crimes punishable by an indeterminate sentence of from one day to life; psychiatric examination before sentence is provided. New Jersey(27) established a neuropsychiatric institute at Skillman for the study of various types of nervous and mental disorders. North Carolina(28) set up a scholarship loan fund for medical students and nurses specializing in psychiatry at the 3 medical schools of the state. Kansas(29) established a treatment centre for "emotionally, mentally, and socially disturbed children." That State also enacted a law releasing the state hospitals and physicians thereof from liability for damages resulting from psychiatric shock treatment "if approved and accepted methods are used"—an interesting reaction to the spate of malpractice suits on this ground entered and threatened(30). Tennessee(31) passed an act to regulate the practice of psychologists. One provision is to the effect that a psychologist or psy-

chological examiner who engages in psychotherapy must "establish and maintain effective intercommunication with a psychologically oriented physician." Nebraska(32) provides for a legislative council to study ways of providing for the needs of the aged. The new Missouri commitment act(33), modeled on the Draft Act of the National Institute of Mental Health, has been declared unconstitutional by a lower court, most curiously on the request of the very department charged with its administration!

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MILITARY PSYCHIATRY

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The Korean War has continued to give an opportunity for further study and evaluation of the management of combat neuroses. Glass (1) in a historical review of psychiatry in the Korean campaign describes extension of the division psychiatrist's function from treatment and evaluation to prevention. When conditions permitted, the division psychiatrist made periodic visits to battalions and other divisional units to aid in the psychiatric orientation of units. Whenever possible, the psychiatrist gave indoctrination talks to line officers.

Glass evaluated the use of nonconvulsive shock therapy in the treatment of combat neuroses with evacuee patients from Korea. Daily nonconvulsive therapy was given for 7 to 10 days. About 50% of those treated showed varying degrees of improvement. The patients treated were considered to be less suitable than those in the division areas. He doubts that nonconvulsive shock therapy could be of any practical value in the early phases of emotional breakdown in combat as the time required for such treatment exceeds the 2- to 4-day period considered optimum for best results in the forward areas.

Marren(2) calls attention to the fact that the clinical picture of combat casualties changes rapidly and that individuals who show marked disorganization and confusion can become alert and clearly oriented after a 24-hour rest. He recommends that these reactions be recorded so, that on re-evaluation, individuals with this type of reaction will not be returned to combat as experience has indicated that they do not do well. He stresses the importance of main-

taining the psychiatric casualty's identification with his combat unit, pointing out that this could not be done if the soldier was evacuated to rear echelons. He warns against indecision on the part of the psychiatrist, maintaining that hesitancy increases the anxiety of the soldier and that precision and dispatch gives reassurance.

Teichner(3) is of the opinion that "combat fatigue" and "operational fatigue" are misleading terms. He believes that "traumatic" and "war neurosis" are more clearly descriptive of the syndrome. He suggests the term "death anxiety neurosis" which, while not a pleasant one, would be more descriptive and accurate. He points out that the drive for self-preservation with its affective aspect, fear of death, and the residue of the Oedipus complex, present in all to varying degrees, provides a neurotic potentiality from which combat may provoke symptoms of "war neurosis."

Schnenck(4) describes in detail 4 examples of psychiatric contacts which vary from psychologic first aid to very brief psychotherapy. A hypnotic approach was incorporated. He considers the methods applicable in war- and peacetime military psychiatry where time limitation exists.

Tolpin(5) in evaluating the duties of a guardhouse psychiatrist proposes additional functions that would help maintain good standards of performance from military personnel and also reduce the number of prisoners. In addition to determining mental competence, the psychiatrist can advise as to the prisoner's ability to benefit from discipline and rehabilitative action. He compares time spent in the guardhouse with the recruit training period when many factors of the erstwhile civilian personality determine the soldier's ability to adjust to military life. A re-evaluation should be made of the men under sentence. The psychiatrist can contribute helpful information concerning psychological factors contributing to the offense and, most important, the fitness of the man for return to duty on completion of his penalty.

Brill, Beebe, and Loewenstein(6) studied the relationship of age to resistance under military stress. Reviewing World War I material, they found the conclusion that men under 21 broke down in greater numbers than their proportion in the army would warrant was based on a doubtful assumption that men sent into combat (in World War I) were of the same age distribution as those entering the army. Their study suggests that men 18-19 years old are the most emotionally fit to resist the various stresses of military service and, that up through the age of 38 at least, there is no suggestion that any particular age is critical.

Ginzberg, Herma, and Ginsburg(7), investigating the problem of the ineffective soldier in World War II, found that the aim of the screening procedure to identify and reject every individual with a psychoneurotic vulnerability was in error as it is not possible to define "potential breakdown" with sufficient precision. Their findings indicate that the student of the problem of breakdown must pay more attention to environmental stresses and supports in order to understand the causes of successful or unsuccessful performance. Consideration of the stresses and strains which have no counterpart in civilian life may yield important clues to failure in the service.

At one of the training centers, a program of group psychotherapy of psychoses was conducted. In the treatment of all psychiatric patients, the emphasis was on return to duty, and separation was made almost impossible. While the length of hospital stay for some of the patients was greater than traditionally acceptable, this program resulted in a marked reduction in the number of transfers and separations as compared with the periods preceding and following this project.

There was a marked trend in the development of outpatient treatment programs. The more nearly adequate psychiatric staffs available probably accounted for this development. So effective was this method of reducing hospitalization that the previously crowded "open" wards were vacant for long periods.

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PSYCHIATRIC EDUCATION

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Undergraduate Psychiatric Education: While 1953 brought no major revamping in medical education, the proponents of "comprehensive medicine" became increasingly vocal and continued to place their convictions into practice. Alan Gregg(1) suggested as a new term for the "whole tree of medicine, including all its branches"—"Great Medicine." Much of the dissatisfaction with continued and increasing "splintering" (*i.e.*, compartmentalization) of Gregg's "Great Medicine" came from medical educators outside the psychiatric specialty. The Dean of Harvard Medical School emphasized the tremendous need to reconstruct our educational programs in an attempt to tie together the various specialties into a comprehensive whole.

This need has given rise to an ever increasing number of experimental teaching programs oriented to this end. Harvard, Western Reserve, Colorado, Tennessee, Pennsylvania, and Boston University are among the more prominent medical schools instituting or carrying on such programs. Of necessity, departments of psychiatry play important roles in all such programs, even though the impetus has often come from non-psychiatric physicians. The problem of finding and training psychiatric teachers who can function effectively in such programs is considerable. Psychiatrists are often as susceptible to the "splintering" impact of specialization as the surgical or medical specialists.

Thus, there has been a demand for psychiatric teaching which goes beyond the strict boundaries of our specialty and an increasing attempt to correlate psychological and social factors with medical illness(2). This has called for a realistic integration of psychiatry into the undergraduate medical curriculum. Carter and associates(3) have outlined the home medical care program at Boston University where emphasis is put on individual supervision of the medical student by both an internist and a psychiatrist.

Coupled with this increased interest in "comprehensive medicine" has been a broadening of the concept of "preventive medicine." According to Barr(4), "Preventive medicine for the individual can draw no sharp line or distinction between diseases of the body and those of the mind." As he wisely notes, such a view of comprehensive and preventive medicine must become deeply ingrained as an "attitude of mind, an aspiration" before a teacher can effectively promulgate it. Seen in this light, medicine is most certainly a social science, and as such the role of the psychiatric educator takes on new scope and new responsibilities(5). What the future of this trend will be is difficult to determine, but clearly the young medical (including psychiatric) educator can no longer isolate himself in his own small domain.

The practical problems of obtaining psychiatric educators continue. A number of these are touched on in a recent editorial(6) in *The Journal of Medical Education.* One is the utilization of the volunteer staff and its relation to the full-time faculty. The perennial problem of supply and demand of trained personnel, and the many conflicts between private practice and a teaching career continue.

With the increased interest in psychiatry and appreciation of its applications has come a demand for improvement in undergraduate psychiatric education, both in the subject matter and the methods of presentation. These matters are of crucial importance because few schools have many more available

hours in the curriculum. Thus improved teaching will have to come largely through better utilization of the time we now have available. Thompson(7) outlines some of the difficulties in increasing curriculum hours and presents a very sensible program now in use in one of the California medical schools. Certainly every psychiatric department must re-examine not only its methods of teaching and its course content but in particular its basic objectives—what it hopes to accomplish with medical students. This should lead to a better utilization of available time. Further, when "comprehensive medicine" as a practical philosophy of medical education becomes more widespread, a large number of "hidden hours" can and will be picked up for psychiatric teaching without ever appearing on the official curriculum to be jealously viewed by other specialists.

From the standpoint of presentation of material, more emphasis is being put on small group and individual teaching than the lecture approach. Nevertheless, shortages of teaching personnel and the very nature of much of the material to be taught, demand continuation and improvement of lecture courses. Allport(8) reviews some of the techniques of good pedagogy: emphasis on student participation to increase his "ego-involvement" in the process, decreasing his anxiety and increasing his self-esteem, utilizing "live" demonstrations such as are made possible by psychodrama techniques, etc. Freeman(9) recognizes the importance of audience participation and good "showmanship" in presenting material to undergraduates. Rappaport(10) points out the need for training in better techniques of interviewing and presents a plan which is quite applicable to medical student teaching. An attempt to evaluate the effectiveness of certain segments of psychiatric education is made by Saslow and Mensh(11). Only through evaluation efforts will we be able to determine whether we are doing effectively what we set out to do.

Graduate Psychiatric Education: The completed report of the Second Conference on Psychiatric Education held in 1952 at Cornell University will prove of real interest. It will constitute the best available thinking of the leaders in this field. John Whitehorn(12) briefly reviews the background and significance of the second conference.

The importance of psychodynamics in the training of residents for psychotherapy is emphasized by Alexander(13). Too often, even in graduate training, psychotherapy is treated as a "commonsense" procedure that one just "picks up" in contacts with patients. Psychotherapy has to be approached with a firm grasp of psychodynamics and applied through close supervision of the psychotherapeutic process. Only through frequent (2 to 3 hours per week), individual supervisory hours can psychotherapy be adequately taught. Flemming(14) discusses some of the reasons why trainees cannot be set free to do psychotherapy with patients without supervision. Gardner(15), in discussing the similarities in the training process of the psychiatrist, clinical psychologist, and social worker, again underlines the need for careful supervision of therapeutic endeavors in training. It should be noted, parenthetically in regard to this last article, that an important aspect of psychiatric education is in the proper training, through supervision, of clinical psychologists and psychiatric social workers. Whatever individual feelings may be among psychiatrists, the facts indicate these groups are taking a progressively more active role in psychotherapy. The sensible way to handle this is to apply our experience and techniques in psychiatric residency training to insure that these nonmedical therapists are carefully selected and adequately trained, not only to do good therapy but to recognize which problems lie outside their province. If this is done, their contributions to psychotherapy, applied and theoretical, can be great.

The many obstacles in training for psychiatric research careers are extensively and entertainingly discussed by Kubie(16). Too often the more capable, energetic and inquisitive minds are enmeshed in educational and administrative responsibilities that make research contributions impossible, even when the desires and capabilities are present. The great need for maturity and extensive training and experience exists, but how to obtain these and still remain in a position to accomplish extensive research is an extremely pertinent problem in a field where both basic

and applied research has unfortunately been slow in coming.

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CASE REPORTS

ELECTROCONVULSIVE THERAPY IN ACUTE MULTIPLE FRACTURES

LOUIS A. COHEN, M. D., AND KENNETH G. JONES, M. D., LITTLE ROCK, ARKANSAS

The successful treatment of a depressive illness with electroconvulsive therapy following multiple fractures was reported in the November 1950 issue of this Journal by one of us (L.A.C.). The patient presently reported concerns a similar case but the treatment was initiated 3 weeks after the acute fractures were incurred.

The patient is a 61-year-old white male who jumped from the second story window of a hotel with suicidal intent. He was admitted to the St. Vincent's Infirmary in Little Rock, Arkansas on December 4, 1952. The radiographic examination revealed a subacromial dislocation of the right shoulder; a simple fracture of the neck of the left talus; a simple fracture of the shaft of the third left metatarsal; a simple comminuted fracture of the shaft of the right femur; a simple depressed fracture of the right frontal bone into the right frontal sinus; and multiple abrasions and contusions. He showed no objective neurological signs of brain damage. The minor fractures were treated with splinting and casts. The orthopedic surgeon (K. G. J.) decided that intramedullary fixation of the fractured right femur would constitute the treatment of choice from the psychiatric as well as the orthopedic standpoint. Therefore, on December 9, 1952, 5 days after the accident, under general inhalation anesthetic, this procedure was carried out successfully. The comminuted fragment of the distal femoral shaft was fixed with 3 screws.

On psychiatric examination this man was found to have a classical picture of involutional melancholia with ideas of having been worthless, sinful, no good, wanting to die, having no future, and a very morbid depressive picture in general. He was very agitated, restless, had to be restrained in bed because he wanted to bump his head against the wall, pull his hair, choke himself, etc. On December 14, 1952, 10 days after the initial injury, he was transferred from the local general hospital to the Gilbert Clinic where security provisions were available. He required heavy sedation to keep him fairly comfortable. The orthopedic surgeon felt that the fractures were sufficiently mobilized that electroshock therapy could be instituted without danger of displacement or redislocation of the injuries.

On December 26, 3 weeks after the initial injuries, electroconvulsive therapy was begun with the Reiter apparatus. After he had received 4 grand mal convulsive treatments he became more cheerful and friendly, easier to manage and sedation could be dispensed with. A total of 8 treatments was given during the 3 weeks following the first one. Six weeks postoperative, he became ambulatory with the assistance of a cane, was cooperative, and on the road to recovery. Eight weeks postoperative, the cast was removed from the left lower extremity. When examined on April 1, 4 months postoperative, it was found that the patient still walked with a cane and that there was limitation of external rotation in the right shoulder and of internal rotation in the right hip. Other functional abnormalities were not evident. Some pain upon motion and weight-bearing of the left foot was demonstrable. X-rays of the left foot and right femur revealed advanced healing of the 2 fractures without alteration in position attained prior to electroshock therapy.

SUMMARY

This case report represents the successful outcome of an acute melancholia with fresh fractures, treated concurrently by orthopedic surgery and electroconvulsive therapy.

FRACTURES OF HIP WITH MANUALLY CONTROLLED BRIEF STIMULUS ECT

Report of Two Cases

D. H. KRANS, Perry Point, Md.

Fracture of the neck of the femur is generally considered a rare complication of ECT (1). During many years of using standard technique in our hospital, we had previously had only 2 such fractures; one, in an elderly man and the other in a 33-year-old man, given ECT in second-stage insulin coma. Therefore, the recent occurrence of 2 cases of such fractures within a month, while using a modified technique employing bursts of high current during convulsion, is a coincidence that cannot be ignored. The gravity of this fracture lies not only in the hazard of an open reduction, but also in the fact that the muscular forces causing the fracture can also produce the more drastic fracture of the acetabulum instead. Also, it is not unknown to have either type of fracture occur bilaterally and greatly increase the hazard(1).

The 2 recent fractures occurred in patients with chronic schizophrenia. One was aged 28, white, with illness of 9 years, hospitalized 8 years, asthenic build, underweight. The other was aged 27, Negro, with illness of 9½ years, currently hospitalized 8½ years, heavy musculature and moderate obesity. There was no definite evidence of any physical illness in either patient from physical, laboratory, or x-ray examinations. Both patients had received ECT in past years without complications. Though neither patient would be considered in excellent athletic condition, they were not more sedentary than the average closed ward patient. The fractures occurred on the fifth and third treatment, respectively. Both were treated by open reduction and insertion of Knowles pins.

Since these 2 fractures occurred in a group of only 27 patients, totaling 365 treatments up to the time of the second fracture, it is essential to review the technique carefully to search for the factor that might be responsible for the high incidence of 7% of cases and 0.5% of treatments.

The patients were in a group of chronic schizophrenics being treated by a variety of methods and combinations of electrotherapy to explore and evaluate the modified techniques as described by Hirschfeld and Bell(2). Using their classification of treatment levels, these 2 patients were receiving "fourth stage" electrotherapy. It consists of producing a convulsion and while the convulsion is in progress, increasing the current to 800 m.a. peak(twice the level necessary for convulsion) for 4 periods of about 2 seconds each. Between these periods the current is reduced to about 200 m.a. Hirschfeld(3) has not noted serious complications with the technique. In our total group to date, 35 patients have received 590 of these "fourth stage" treatments. The only additional fracture noted has been 1 vertebral compression. It would seem, therefore, that the treatment as we carry it out does not carry more than the expected amount of skeletal injury from shock treatments, except for the strikingly high incidence of hip fracture. One other patient limped and complained of pain in the upper leg, sufficient to discontinue treatment, but no diagnosis could be made. The question arises whether this particular technique can produce postural and muscular conditions particularly hazardous to the hip joint. In the technique used for these patients, the current level is controlled manually and can be varied from an abrupt current shift to a very gradual glissando. This applies not only to the original raising of current, but to the 9 other shifts in current level required to give the 4 brief bursts of extra current required in "fourth stage" treatments. No 2 operators would do it exactly the same. It would seem unlikely that the original raising of current to convulsive level is particularly traumatic, since these convulsions produced by manual control appear smoother and easier in onset than those produced by an automatic timer with abrupt or very sharp build-up of current. However, having a current flowing during the convulsion induces muscular contractions in addition to those produced by the convulsion. This is obvious in the inability to detect the

clonic phase because of the electrically produced rigidity. Raising of current up to the 800 m.a. level causes a further increase in muscular tension and further stiffening of the body. This is particularly noticeable in the arms which will generally flex across the chest as the current is raised in the first burst of the 800 m.a. current. The effects in the legs are not as clear or consistent, but in some patients there is a definite increased extension of the foot with each current increase. It would seem, therefore, that there is a definite possibility that these extra muscular contractions superimposed on the varying tensions produced by the convulsion could result in moments of dangerous force and direction of pull, particularly traumatic to the neck of the femur. It may not be just the current rise that is important, but its timing in relation to the phase of the convulsion. For example, in the second case, the first burst of 800 m.a. current was given while the patient was still in the early tonic phase of the convulsion, with the thighs flexed and the legs straight up in the air at right angles to the trunk. No one in the treatment room could remember just what the conditions had been in the first case. Kalinowsky has suggested the fracture of the hip is more likely if the legs are restrained. For this reason we have generally left the legs free to move. After the second fracture, the policy was followed of waiting until the legs returned to the table before increasing the current. The turning of the dial to produce the 800 m.a. level has been made more deliberate, taking about 2 seconds to raise from 200 to 800. In 225 treatments since that date, there have been no definite skeletal complications. The incidence of hip fracture for the total group treated is now 5.7% or 0.3% of treatments.

It is suggested that anybody working with a technique involving the raising of current flow during a convulsion should attempt to keep an accurate record of the timing of the current changes in relation to the convulsion and the position of the body or else rigidly standardize every detail. It is very difficult to remember an hour later the details that might have clarified the mechanism of the fracture. An observer alert to posture and the sound of a breaking bone might pinpoint the precise moment of such a complication.

Summary

Two cases of fracture of the neck of the femur are reported in healthy schizophrenics under 30 while using a technique of electrotherapy with a manually controlled square wave brief stimulus current, raised at intervals during the convulsion. These cases occurred in a group of 35 patients, representing an incidence of 5.7% or 0.3% of treatments, which is in marked contrast to 2 such fractures in the same hospital during the many years of standard ECT. It is suspected that the alterations in current level superimpose muscular contractions on the convulsive movements, which in certain phases of the convulsion might be particularly hazardous to the hip joint.

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CORRESPONDENCE

Editor, AMERICAN JOURNAL OF PSYCHIATRY:

SIR: A number of points in President Appel's letter of November 11 to the members of A.P.A. seem to require free and open discussion before final decisions are made. Several questions that occurred to me seem to puzzle others with whom the letter was discussed, as well as myself. It would be helpful if the issues which seem to me personally important were presented for the consideration of all.

There was an unofficial ballot in 1951 regarding the consolidation of the New York and Washington offices—the only ones actually in question at present. About two-thirds of those eligible to vote at that time did so, and 95 percent favored consolidation. Of these favoring consolidation, approximately 63 percent favored New York, and 26 percent Washington. There must be powerful reasons, of which we have not been told, to lead the Committee on Permanent Home (made up of eight past presidents for whom I have the highest respect, individually and collectively) and Council to ignore this vote. Except for the one point on which there seems to be complete agreement—that in the interest of economy and efficiency there should be one (and only one) general or central office.

Now we are told that "comprehensive and impartial review of all the facts" leads to a unanimous vote by Council to establish headquarters in Washington. Presumably this review was made by the Committee on Permanent Home. I, for one, would like to know what were considered to be "the facts regarding relative advantages" of the two locations. The list of assets and liabilities which I worked out for Chicago, Philadelphia, New York, and Washington indicated New York as by far the most important center for our Association.

It seemed that we were being urged to approve Council's choice. It is a fair question —suppose we had not? Would this "opinion poll" also be ignored—perhaps on the basis that only the biased voted? That is essentially what has been rumored with respect to the previous vote. Isn't there something we, the rank and file membership, should know about the "Association's purposes," which will be served "most effectively" in Washington, or in New York, for that matter?

If the purposes can only or best be served in Washington, there is no reason I can see as of now for a branch office in New York or anywhere else. Fortunately, the editor's office is where the editor is, and this will always be true. We do need official representatives at key points throughout the country, but we already have these in the officers and council members, committee chairman, and others.

If the office is located in Washington, and the Association is drawn into many legislative matters, is there danger of losing tax-free status?

The central feature of President Appel's letter is the purchase of a "dignified, spacious" property in Washington. The questions of cost, and where the money is to come from for this "sound real estate investment" are not presented. According to my information, which is believed to be authoritative, the property is priced at $225,000 and will, according to one member who looked it over carefully, require the expenditure of $10,000 to $25,000 to make it fully usable.

If the Association had $250,000, which it has not, would it be better business to invest the money so that a return of perhaps $10,000 a year might be had, which could be used to further some project? Or would it be better to buy a house and operate it as a "Permanent Home"? If the place is not tax-free, then in lieu of the rental that would be paid for leased quarters, one must figure interest on investment, taxes, depreciation, repairs and maintenance—heat, water, lavatories, decorating, and especially wages. It would be interesting to know the estimated annual cost of all these items. The number of rooms and size of the grounds to be maintained

would enter into the costs of maintenance and repairs. Would wages and materials require more or less than $20,000 a year? Add taxes, interest, social security, depreciation, and the cost is staggering. If someone were to offer such a property to the Association as a gift, could we afford to accept it?

The money to purchase this or any other permanent home must come from somewhere. How is it to be raised? As a member of the Budget Committee, I know the Association does not have sufficient reserve funds to consider such a proposition, and in my judgment it would be foolish to invest our reserve funds in this way. We need income, not outgo. Presumably the money would have to be obtained by voluntary contributions or by special assessment on the members. We do need increased space, because much of the program in Washington is presently run by projects financed by grants from foundations. These projects are limited in time and in money but usually mean an obligation that we carry them on. Is this true of the new Architectural Project? Does Council expect this to continue beyond the period of the grant? If so, where are the funds to come from? This has happened with other projects.

There are many disadvantages to buying property for the purposes of an Association. If Council is to be a truly representative body, rather than one which influences the viewpoints of members in terms of its own opinions, it would seem to be time that we have a legal mail ballot to decide (1) whether we shall have a general office in New York or Washington, and (2) whether we should buy a Permanent Home under any presently existing circumstances, no matter where Headquarters may be.

I believe all of us will abide by the results of such a truly democratic procedure.

LAWSON G. LOWREY, M. D.,
New York City.

BATTLE NEUROSIS

There fell in this battle of Marathon, on the side of the barbarians, about six thousand and four hundred men; on that of the Athenians, one hundred and ninety-two. Such was the number of the slain on the one side and the other. A strange prodigy likewise happened at this fight. Epizêlus, the son of Cuphagoras, an Athenian, was in the thick of the fray, and behaving himself as a brave man should, when suddenly he was stricken with blindness, without blow of sword or dart; and this blindness continued thenceforth during the whole of his after life. The following is the account which he himself, as I have heard, gave of the matter: he said that a gigantic warrior, with a huge beard, which shaded all his shield, stood over against him, but the ghostly semblance passed him by and slew the man at his side. Such, as I understand, was the tale which Epizêlus told.

The History of Herodotus

PRESIDENT'S PAGE

From Thursday evening, October 29, through Sunday, November 1, till 4:15 in the afternoon, The American Psychiatric Association was intensively active. Committee chairmen met Thursday for dinner and told one another of their Committee's interests, plans and problems. Discussion continued late into the night. This was the opening gun and keyed up the chairmen for committee meetings and activity the following two days.

Saturday and Sunday Council met and for the first time, a historic occasion, the Speaker and the Secretary of the Assembly, Dr. Joseph L. Abramson and Dr. John R. Saunders, sat with Council together with several members of district branches. They entered freely into discussion both spontaneously and as matters were referred to them for comment and recommendation. Everyone felt a new step had been taken in the progress of the Association in this new and closer relationship of the officers, both elected and administrative, and with the membership at large. This is only a step—new ways can be devised for effecting an even closer relationship. The Long Term Policy Commission recommended a change in the Constitution whereby the Assembly's field of discussion is appropriately broadened. The Council voted $1,500 for the Assembly's activities. The Speaker of the Assembly and a member of the Assembly, Dr. David Flicker, were appointed and met with a Committee to Communicate with the Membership on Matters Relating to the Possibility of a Permanent Home. In these new relationships with the Assembly, one felt closer to the membership at large and progress was in the making.

There was a beehive of activity in most of the committees and the Council. As Dr. Abramson has written me, he was "amazed at the tremendous amount of effort, time and energy which the members of Council have expended in the affairs of the organization." One can scarcely realize the amount of activity and the comprehensiveness that are involved in the operations of The American Psychiatric Association. As I sit down to write, a tome is presented to me of the "Proceedings of the Council" at its recent meeting. Four hundred and forty-seven pages! And this does not include Committee reports and deliberations. I believe it is inconceivable to the average member with what thoroughness, earnestness and conscience so many matters are deliberated. On most subjects all angles are reviewed; all points of view are presented and discussed. The personalities of the Council represent a variety of temperaments and breadth of experience. The enthusiasm of the extroverts and activists are cut into and lassoed by the questions and doubts of the obsessives and the introverts. Idealists are tempered by the realists.

I wish I could review the high points of these 400 pages. There is scarcely an aspect of psychiatry that is not touched. There is hardly an interest an individual member of the A.P.A. might have that is not discussed: from the proposal of a study on the infectious origin of feeblemindedness to a study of effectiveness of communication at the annual meeting; from the needs of the Committee on Public Health to study alcoholism to the standards of child psychiatry; from problems created by salary levels in the veterans hospitals to staff deficiencies in the public hospitals; from standards for private psychiatric hospitals to difficulties in education of psychiatric nurses; from a request to send a representative to Rome to a consideration of the claims of Texas or Massachusetts for an annual meeting; from the difficulties of accomplishing adequate public information to the report of the Committee on Civilian Defense; from the Conference on Mental Health held in Washington to the proposed regional conferences on research.

And by the way, the Washington Conference on Mental Health, with representatives of over 50 organizations interested in promoting mental health, showed the difficulty of communication and the need for it. Further conferences, in my opinion, are desirable to effect clarification and communication between these many organizations interested in common problems. The Conference was historic in that it was the first large effort at

collaboration between The American Psychiatric Association and the American Medical Association! We need more of this. It is hoped that a combined conference will be sponsored between representatives of The American Psychiatric Association and leaders of our medical colleagues in state medical societies.

The Central Inspection Board is doing splendid work under the leadership of Dr. Tarumianz and in the wise, tactful "inspections" of Dr. Chambers. But money is desperately needed that this work, fundamental to the progress of our public hospitals, may continue. The Joint Accreditation Board and the Committee on Mental Health of the American Medical Association are working hand in hand with us to search out new possibilities of financing this project.

The Ad Hoc Committee on Education in Public Hospitals in Liaison with the American Psychoanalytic Association is hard at work. With the 800 young psychiatrists in analytic training, a new pool of men is going to be available for psychiatric teaching, therapy and research. With the development of adequate opportunities many of these men could be drawn into public hospital psychiatry. Many of them are interested in the new approaches to psychodynamic therapy of the psychoses.

Just as American psychiatry is stirring with new ideas, new experiments, and is showing signs of change and transition, so The American Psychiatric Association is full of new currents and activities. The A.P.A. is not static. Current and new developments are in process. To prepare for the near future, funds will be required for important developments. For this purpose an Ad Hoc Committee on Endowment Fund has been appointed under the chairmanship of Dr. William B. Terhune. No matter how the question of A.P.A. Headquarters is decided as to location, the time is coming when it is becoming desirable to own a building or home. It is very likely that the Endowment Committee will soon formulate plans to raise money for this and other long-term purposes. This seems to me be to an important need for the development of the Association.

In my recent letter to the membership I reported that the Committee on a Permanent Home has recommended, after over two years' study, the establishment of A.P.A. Headquarters in Washington, with continued maintenance of offices in New York and Toronto, and the establishment of offices in other areas as needs arise. The Council concurred in this recommendation, subject to ratification by the membership. A letter was immediately sent to the membership acquainting them with the action of Council and asking them to express their preferences on a postal card. This was for an exploration of opinion for the benefit of Council; an official ballot by mail to be sent later. The Council did not contemplate the purchase of an A.P.A. Headquarters without the support of the membership. A committee has been appointed, with Dr. Overholser as Chairman, to explore and evaluate real estate possibilities in Washington.

Finally, I made a suggestion to Council, which it voted to explore: "Just as we had inestimable benefits from the Flexner Report on Medical Education and the American College of Surgeons' study of hospitals, so we should now have a study, by a sociologist or committee of sociologists or a foundation, of state mental health programs and administration, the factors making for their breakdown and crisis and the factors making for success. Patterns of breakdown seem to repeat themselves. Are the chief factors in breakdowns of program, change of political party, or politics, or is it difficulty in public and personal relations on the part of directors of mental health? The American Psychiatric Association cannot make the needed study. Neither can the Public Health Service. I believe that we need a Flexner Report on mental health administration. This should be a great help to administrators and commissioners, and society.

COMMENT

THE PROBLEMS OF THE AGING

The popular interest in "geriatric medicine" as exemplified by numerous contributions to the literature, public hearings, and symposia has led to a more wholesome attitude on the part of both profession and public toward the problems of the ever-increasing number of older members of the population. One result is that these senior citizens are considered more deferentially; such terms as seniles, old fogies, dotards, etc., are less frequently heard. One significant trend is the formation of clubs for elderly persons in which mutual interests are advanced.

There is a growing consciousness in medical and social circles that chronological age should not be the criterion either for compulsory retirement or for continuing in a life work. Men in public life who achieve the stature of statesmen are invaluable even at advanced ages and they are honored by their colleagues and their counsel sought because of their wealth of experience and their native wisdom deepened with the advancing years. We think of such men as Justice Oliver Wendell Holmes, former president Herbert H. Hoover, elder statesman Bernard M. Baruch, and pre-eminently Prime Minister Sir Winston Churchill. Such men, compared with the common run, virtually live more than one long and useful life. For them there is no chronological retiring age.

Educators, on the other hand, have as a rule been quite rigidly retired around the age of 65, although they may be at this time at the zenith of their value in wisdom and experience and as teachers and counsellors. While it would indeed be reasonable to relieve senior educators of many routine duties, their continuing service, perhaps on a part-time basis or in the capacity of "readers" in the English universities, would appear to be eminently desirable.

In this field a change for the better is noted, for example, in one particular school that has experimentally appointed to the faculty professors retired from other schools. In this way the faculty of a small college has been strengthened by the addition of men already distinguished in educational leadership and research.

It is noteworthy that the American Psychological Association at its sixty-first annual convention recently held went on record as favoring determining the time of retirement of educators not arbitrarily on the basis of chronological age, but rather by the criteria of personal qualities and functional capacity.

A similar trend is apparently developing in other fields. The New York State Joint Legislative Committee on the Problems of the Aging, under the leadership of State Senator Thomas C. Desmond, was the first such agency among legislative committees. It has proved to be an admirable organization which has had the valuable cooperation of specialists and advisory committees.

The titles of the last 3 reports of Senator Desmond's committee—1950, "Young at Any Age"; 1951, "No Time to Grow Old"; 1952, "Age is No Barrier"—give some indication of the nature of these statements. They include communications not only from specialists but also from certain senior citizens themselves setting forth their own experiences and viewpoints. These valuable reports are profusely illustrated and contain considerable statistical material.

The joint legislative committee hopes to continue its investigations in various directons as well as to render constructive service in attacking the problems of the aging, from the standpoint of both management and senior employees, and to provide counselling for those about to retire. The experiences already gained especially in the broad field of the socio-economic status of the older members of the population indicate the need for continued and expanded mental hygiene efforts.

W. C. S.

SHOP TALK

There appears to be misunderstanding in some quarters as to the selection of papers for publication in this JOURNAL. It is carelessly assumed, not infrequently, that only papers read at the annual meeting of The American Psychiatric Association qualify for inclusion in the Association's official publication.

The facts are these: The number of manuscripts submitted independently during a 12-month period and the number accepted by the program committee for the annual meeting have been, during some years past, approximately equal. In quality also there has been little to choose between these two sets of contributions. There have been excellent as well as less good offerings in both, and it has been the consistent policy of the editorial board to publish the best of both program and non-program material. As it works out, each of these two sources supplies about the same number of published articles.

A word may be in order concerning the method of selection of papers on the annual program to be printed in the JOURNAL. Each year, before the meeting, voting lists are submitted to the members of the editorial board and to an equal number of officers and fellows for their recommendations. Similarly evaluations are received from those presiding at the various sessions during the annual meeting. By this means each paper receives a considerable number of ratings which are scored according to a scale that has been carefully worked out. The result is that each paper published has been chosen on the basis of the returns of the voting lists; and while each manuscript is reviewed in the editorial office as soon as practicable after the meeting, it is generally found that ratings established by the voting lists are satisfactory to determine acceptance.

All this takes time. All of the lists are not returned equally promptly (delay in matters not personally essential being a normal human habit) and when all returns are in, tabulation of the recommendations is a substantial chore. Every effort is made, however, to notify each contributor within two months after the annual meeting whether his paper will appear in the JOURNAL or may be released for publication elsewhere.

Other periodicals, representing special interests in the general field of psychiatry, not infrequently request the release of papers pertinent to those interests. Authors, too, may wish release for this reason. Such requests from authors have always been honored, sometimes reluctantly. At the same time the JOURNAL, representing the entire discipline, aims to publish representative material from all divisions of the annual program. The objective is to make our official publication comprehensive and to report significant work on all fronts.

It were not possible for all things to be well unless all men were good—which I think will not be yet this good many years.

—SIR THOMAS MORE
Utopia

NEWS AND NOTES

THE INTERNATIONAL ASSOCIATION FOR CHILD PSYCHIATRY.—This association will hold an international institute on child psychiatry on August 13 and 14, 1954, in conjunction with the Fifth International Congress on Mental Health which will be held in Toronto, August 10-21, 1954. The theme of the institute is "Emotional Problems of Children Under Six." Members of the institute will discuss prepared clinical case studies and research reports related to the treatment of young children. Papers will be submitted from the United States and other countries, which illustrate a variety of treatment methods and different professional and cultural points of view.

President of the association is Dr. Frederick H. Allen of Philadelphia. Secretary-General: Dr. Abraham Z. Barhash, who may be addressed at 1790 Broadway, New York 19, N. Y.

MINNESOTA ANNOUNCES CONTINUATION COURSES IN PSYCHIATRY AND NEUROLOGY.—The University of Minnesota will present a continuation course in neurology for general physicians and specialists, January 25-30, 1954, in the Center for Continuation Study.

Diagnosis and management of the commoner neurological disorders will be stressed. The guest faculty will include Dr. Madison H. Thomas, chairman, neurology section, Department of Psychiatry, University of Utah; Dr. A. Theodore Steegman, professor and chief, Department of Neurology, University of Kansas Medical Center; and Dr. Adolph L. Sahs, professor and head of the Department of Neurology, University of Iowa. As an integral part of the course, the annual John B. Johnston Lecture will be presented on the evening of January 27 by Dr. Andrew T. Rasmussen, professor emeritus of anatomy, University of Minnesota. The course will be under the direction of Dr. A. B. Baker, professor and director of neurology, who will be joined by other members of the faculty of the University of Minnesota Medical School and the Mayo Foundation.

From February 1 to 5, a continuation course in child psychiatry for general physicians, pediatricians, and psychiatrists will be presented, consisting principally of small group discussions of common problems. These will be led by recognized experts in the field. A minimum of didactic lecture material will be presented. The guest faculty will include Dr. Sherman Little, Orthopsychiatric Department, Children's Hospital, Buffalo; Dr. Mabel Ross, mental health consultant, U. S. Public Health Service, New York City; and Dr. Henry H. Work, assistant professor of pediatrics and psychiatry, University of Louisville. Dr. Reynold A. Jensen, professor, Departments of Psychiatry and Pediatrics, University of Minnesota, will direct the course. Lodging and meal accommodations are available at the Center for Continuation Study.

NATIONAL ASSOCIATION FOR MENTAL HEALTH.—The third annual meeting of the National Association for Mental Health was held in Cleveland, Ohio, from October 31 through November 2, 1953. Five hundred representatives from 300 state and local mental health associations attended. Also represented were the National Institute of Mental Health, The American Psychiatric Association, the Neuropsychiatric Division of the Veterans Administration, and many other professional and governmental organizations.

The theme of the meeting was "Mental Health—Everybody's Business." Representatives of the clergy, industry, law enforcement agencies, public health, and parent-teacher groups developed this theme in relation to their own fields.

The Rev. Seward Hiltner, professor of pastoral theology at the University of Chicago, represented the clergy. Industry's view was expressed by Dr. J. Elliott Janney, industrial psychologist, of Rohrer, Hibler, and Replogle in Cleveland. Mr. John M. Glea-

son, chief of police of Greenwich, Connecticut, spoke for the law enforcement agencies. Public health was represented by Miss I. Estelle Dunlap of the Frances Payne Bolton School of Nursing in Cleveland, and parents and teachers by Mrs. Russell C. Bickel, secretary of the National Congress of Parents and Teachers.

Highlights of the meeting were:

1. Addresses by Dr. Karl Menninger and Mary Jane Ward, author of "The Snake Pit."

2. A report by Dr. William Malamud, director of the NAMH schizophrenia research program. Dr. Malamud stated:

> Our students of genetics have been able to prove the significance of the constitutional endowment of the individual in the development of the disease, but equally important is the fact that it has been possible to demonstrate that in a large measure these factors serve to make the person more vulnerable to the disease, provided certain stress situations develop which bring forth this constitutional weakness, and that the disease, schizophrenia, is really a resultant of a combination of constitution and early environmental factors. This knowledge can now be utilized in the development of a rational program of prevention.

3. A report by Dr. George S. Stevenson, national and international consultant of the National Association for Mental Health, in which he declared that mental illness was the most costly of all the illnesses afflicting the American people, in terms of both financial expenditure and loss and through personal and social disaster.

4. A report by Mr. Raymond G. Fuller who has just completed a 2-year study of the administration of state mental health services. Mr. Fuller stated that the states were still using "stone age tools" in their administration of mental health services.

5. Report by Dr. Erich Lindemann who stated that the field of preventive psychiatry lagged far behind preventive efforts in other health fields.

Dr. Lindemann said that psychiatry has lately turned more and more away from exclusive preoccupation with the needs of the individual patient to the emotional needs of the family and the community.

6. Richard Weil, Jr., formerly president of Macy's New York store, was elected President of the National Association for Mental Health. He told the convention that the mental health associations would need at least 10 million dollars to do an adequate job next year. This fund, he said, would be used for allocation of grants for new research on mental illness; allocation of grants to medical social work and allied training institutions for the expansion of programs for training personnel in the psychiatric and mental health fields; fellowships and scholarships to students in these fields; and in the establishment of information and referral centers in communities where none exist today.

Mr. Weil said that the NAMH was now in the process of setting up a scientific research committee, which would serve as a clearing center for information on all research being carried on in the field of mental illness and which would select areas of research to be financed by grants from the National Association for Mental Health fund.

Death of Dr. Kindred.—The death of Dr. John Cramer Kindred, owner and director of the River Crest Sanitarium in Astoria, N. Y., occurred October 25, 1953, at the age of 50.

Dr. Kindred, a native of New York, was the son of the late Representative John Joseph Kindred. He graduated in medicine from the Medical College of Virginia in 1930.

He had been associate attending psychiatrist at Queens General Hospital and was active in several medical and civic organizations. He was a former president of the National Association of Private Psychiatric Hospitals. He had been a fellow of The American Psychiatric Association since 1935.

1953 Achievement Awards.—Superintendents of State and Veterans Administration institutions who received achievement awards for notable advances in hospital administration and treatment procedures during the year were: Dr. Daniel Lieberman (Sonoma State Hospital, Eldridge, California), Dr. E. S. Post (V. A. Hospital, Sheridan Wyoming), Dr. Edward Johnson (Sel-

kirk Mental Hospital, Manitoba, Canada), Mrs. Anna T. Scruggs (Enid State School, Oklahoma), Dr. Gale H. Walker (Polk State School, Pennsylvania), Dr. P. C. Steck (Anna State Hospital, Illinois).

These awards were presented during the meeting of the Fifth Mental Hospital Institute, Little Rock, Arkansas, during the past October. Forty-five states, the District of Columbia, 7 Canadian provinces, and Hawaii were represented at the Institute by 271 delegates, which was a record attendance.

Training in Group Development.—The National Training Laboratory in Group Development will hold a 3-week session at Gould Academy, Bethel, Maine, June 20 through July 10, 1954. Persons working with groups in a training, consultant, or leadership capacity in any field are invited to apply.

The NTLGD is sponsored by the Division of Adult Education Service of the NEA and by the Research Center for Group Dynamics of the University of Michigan, with the cooperation of the faculty members from the universities of California, Chicago, Colorado, Illinois, Texas, Harvard, Ohio State University, Teachers College at Columbia University, and other educational institutions. Its year-round research and consultation program is supported by a grant from the Carnegie Corporation of New York. For further information, write to the NTLGD at 1201 Sixteenth Street, N.W., Washington 6, D. C.

Group Therapy Award.—The American Society of Group Psychotherapy and Psychodrama announces an award of $150 to be granted in the year 1953-54 for the best paper dealing with research, theory, or experience in or pertinent to group psychotherapy and psychodrama. The award will be made only if the committee of judges feels that a worthy report has been prepared during the year. This committee will consist of a psychiatrist, a psychologist, and a sociologist as follows: Jules H. Masserman, Robert W. White, and Ernest W. Burgess.

For further information write to: Dr. Edgar F. Borgatta, Laboratory of Social Relations, Harvard University, Cambridge 38, Mass.

Finger Lakes Neuropsychiatric Society.—This society, an affiliate of The American Psychiatric Association, held its annual dinner meeting at the Veterans Administration Hospital, Canandaigua, New York, November 12, 1953. Dr. Robert W. Rasor addressed the large group present on the psychopathology of drug addiction.

The Society elected the following officers: president, Dr. Benjamin Pollack, Rochester State Hospital, Rochester, N. Y.; vice-president, Dr. Edwin M. Levy, Veterans Administration Hospital, Canandaigua, N. Y.; secretary-treasurer, Dr. Murray Bergman, Newark State School, Newark, N. J.; council: Dr. Benjamin Pollack, Rochester; Dr. Louis Lopez, Canandaigua, Dr. Edwin M. Levy, Canandaigua; Dr. James F. Murphy, Willard, N. Y.; Dr. Murray Bergman, Newark, N. J.; Dr. Robert Schopbach, Clifton Springs, N. Y.; and Dr. Jacob Schneider, Willard, N. Y.

The Greater Kansas City Mental Health Foundation.—Milton E. Kirkpatrick, M. D., reports the dedication of the new Psychiatric Receiving Center on October 16, 1953. Enabling legislation was passed by the State of Missouri in May 1950; ground for the Receiving Center was broken in May 1952; and it is expected that the building will be ready to receive patients in January 1954.

The Receiving Center will be devoted to short-term psychiatric care, research, and educational programs for professional personnel.

The address of the Foundation is: City Hall, Kansas City 6, Mo.

American Group Psychotherapy Association.—The Association will hold its eleventh annual conference January 15-16, 1954, at the Henry Hudson Hotel, 353 West 57th Street, New York City.

The conference will be preceded by 3 workshop tables on January 15, at 3 p. m.

and the general session will be held between 7:30 and 10 p. m., to be followed by a cocktail party.

January 16, Saturday morning, will be devoted to 6 panels dealing with group therapy in mental hospitals, general hospitals, private practice, in the treatment of addiction and alcoholism, in child guidance, and a number of other related fields.

The address of the American Group Therapy Association, Inc. is 228 East 19th Street, New York 3, N. Y.

Dr. Heaver Heads Speech Hospital.—Announcement has been received of the appointment of Dr. W. Lynwood Heaver to the medical directorship of the National Hospital for Speech Disorders, 61 Irving Place, New York City. A graduate of the University of California, Dr. Heaver received his M. D. degree from Columbia University in 1937. Since 1946, he has been adjunct neuropsychiatrist at Lenox Hill Hospital; prior to this he was a member of the resident staff on the New York Hospital-Westchester Division for 7 years. A Fellow of The American Psychiatric Association, he has since 1947 been panel consulting psychiatrist to the Board of Education of the City of New York, and from 1947 to 1950 was senior consultant psychiatrist of the New York Regional Office of the Veterans Administration. His appointment comes on the eve of the Speech Hospital's thirty-seventh anniversary.

IMPORTANT NOTICE

AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY, INC.

It has been necessary to change the date of the Spring, 1954, examination. Although originally announced for April 29 and 30, it is now necessary to change the date to May 10 and 11, 1954. The other arrangements remain the same.

David A. Boyd, Jr., M. D.,
Secretary-Treasurer.

Half the wars of Europe, half the internal troubles that have vexed the European states . . . have arisen from theological differences or from the rival claims of Church and State.

—James Bryce,
The American Commonwealth

BOOK REVIEWS

DESIGN FOR A BRAIN. By *W. Ross Ashley*. (New York: Wiley and Sons, 1952. Price: $6.00.)

This ingenious book, by the director of research, Barnwood House, Glouster, England, may be described briefly (and somewhat inaccurately) as a commentary on cybernetics. It is, in fact, an examination of basic principles by which adaptive behavior can be exhibited by a machine, and presents a new concept—that of ultrastability—by which a living organism may adjust to varying circumstances by purely mechanistic processes.

The author reminds us that the living organism, though mechanistic, "learns" by experience so that its operations become more effective, its behavior "better adapted." He wishes to identify the nature of this change called learning. At the outset, he discusses simple dynamic systems, their variables, and their interrelationships, for example, the swinging pendulum with its angular velocity which constantly changes in conformity with its varying angular deviation from the vertical. Potential variables outside this "system," such as the length of the pendulum, constitute parameters. The range over which the variables move make up their "field." Then considering the animal as a machine, he points out that organism and environment form an "absolute system" in that the organism affects the environment, and the environment, the organism. The processes of this interaction of animal and environment constitute a "line of behavior," the variables of which may be measured quantitatively, as on a dial-indicator. Such a system has "feedbacks" in that each variable is itself modified by the effects it produces. Survival can occur only when the "essential variables" remain within physiological limits.

It is the unique result of the feed-back connections that a machine posessing them becomes "goal seeking" when the connections tend to reduce "error." (It would become goal-avoiding if the connections were reversed to increase the error.) Thus, the feedback makes a system both goal-seeking and automatic. "Stability" results when the line of behavior of a system, through operation of its feedback mechanisms, never deviates beyond its field. Adaptation, then, is the achievement of a stable behavior, the essential variables of which remain within physiologic limits. Homeostasis, as conceived by Cannon, is a good example, the mechanisms being inborn. In a similar fashion, "learned" reactions come to form a stable system. For example, the kitten learns how closely to approach the fire on a cold day through the controlling feed-back mechanisms of excessive heat or cold, varying with the distance from the fire.

A parameter, being a variable outside of system, changes the field of the system when it itself is changed. Stimuli may often be represented as a change of parameter, and a change of parameter alters the stability of a system so that a new stability must be achieved.

Variables may exhibit 4 degrees of constancy: (1) full-function, varying without finite constancy; (2) part-function, with finite intervals of change and of constancy; (3) step-functions, with finite intervals of constancy separated by instantaneous jumps; and (4) null-functions, *i.e.*, no change over the period of observation. Step-functions (for example, the sex-hormone content of the blood stream as an animal passes puberty) play an important part in biological systems in that their abrupt changes, induced when main variables reach a "critical state" (overshoot the limits of stability), alter the field of the variables and thus force a new trial for stability. (A man, acting consistently under one set of circumstances, comes to act quite differently, but eventually consistently, when the circumstances undergo critical change.)

Through these logical steps the author arrives at his major contribution: the principle of *ultrastability*. In an absolute system of many variables and a large number of step-functions as alternative parameters, the transgression of any variable across the critical boundaries of the field induces a change in a step-function which alters the field. If any of the system of variables overpasses the critical boundaries of the new field, a step-function again changes and calls still another field into existence. Thus, one field after another is rejected until one appears within which all variables remain and so achieve stability or "ultrastability." The author defines this principle of ultrastability in the following terms: "An ultrastable system acts selectively towards the fields of the main variables, rejecting those that lead the representative point to a critical state, but retaining those that do not." This principle he considers adequate as an explanation of adaptation without the invocation of a *deus ex machina*.

The remainder, some two-thirds of the book, is devoted to a detailed elaboration of the principle and its presumed application to the operation of the adapting nervous system. He describes a machine, the homeostat, by which he tests the principle—a system of 4 magnetic units interconnected in such varying ways as to constitute a system of 8 interacting variables, 4 of the magnet-deviations and 4 of the uniselector positions, the latter acting as step-functions the sudden changes of which alter the fields. He is not concerned whether this machine uses methods like those employed by the living brain—"My aim, on the other hand, is simply to copy the living brain"—*i.e.*, the "behavior" of the living brain, failing or succeeding after the brain's fashion.

In this review no description of the author's long argument is possible. He devotes much logical

thought to the analysis of ultrastability in living organisms and to the operation not only of fully connected systems but also of those that are subdivided or "iterated"—a condition he considers to exist in the nervous system. He arrives finally at the conception of a "multistable system"—one consisting of many ultrastable systems, joined main variable to main variable, all the main variables being part-functions. He holds that the main features of the multistable system are not only possible but necessary as an explanation of adaptation by the nervous system. He conceives of animals adapting, not to the whole universe, but to appropriate parts of it in sequence—"serial adaptation." He concludes with a chapter on the interaction between adaptations, in which he asserts that in a multistable system previous adaptations alter subsequent ones, thus suggesting a basis for learning and for memory. Six final chapters present a mathematical analysis of the whole problem.

This book is admittedly more nearly an exercise in deductive logic than one in the usual scientific method of observation and induction. There is nothing here precisely neurophysiological or directly relative to the nature of neuronal activity. The book is not a dissertation on how the brain works, but rather on principles that could underly the brain's operation, and which, in the author's opinion must underly it. It is therefore an argument by analogy, intriguing, ingenious, even brilliant, a mathematical tour de force. It is remarkable for its skill in expressing its mathematical concepts in language that is lucid and intelligible, albeit difficult for the nonmathematician.

Though appealing in its general outline, in places the argument is less than convincing. For example, it is not altogether clear why, in a living organism. the passage of a main variable beyond the critical point should necessarily change a step-function in such a way as to offer another opportunity for the achievement of stability. This difficulty is surmounted by the author's appeal to natural selection of the successful changes in parameter. Again, in the complex interplay of the subdivided or iterated system, it is not clear how one can be sure of the process of events without reference to the changes in an actual living organism. In fact, this great analogy, like that of cybernetics itself, would gain in credibility by confirmatory evidence on many points from the processes of adaptation in living organisms. Finally, the multistable system appears weakest in achieving the author's principal aim—an explantion of learning and memory. It is less than obvious how an ideal multistable system, constructed after the fashion of the author's homeostat or even his projected "dispersive and multistable system" machine, could adapt more readily to a new situation for having previously adapted to a similar one, or, upon repeated trials, reach stability with increasing directness and speed. The "learning process," as described for such machines, seems to refer to the changed interactions of variables after failures to reach stability, rather than to the change wrought in a reaction by a previous trial.

To return to our original characterization, this is a commentary on cybernetics and, as such, is both informative and stimulating. One looks forward with interest to the further development of the author's concept, and its more intimate elaboration by reference to the actual processes of adaptation in living organisms.

ROLAND P. MACKAY, M. D.,
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A TEXT-BOOK OF MEDICAL PSYCHOLOGY. By *Ernst Kretschmer, M. D.* Translation from the 10th German Edition with an introduction by *E. B. Strauss F.R.C.P.* (London: The Hogarth Press, 1952. Price: 30s.)

The last English translation of Kretschmer's *Medizinische Psychologie* preceeding the present one appeared in 1934. It was done by the same translator, who had the advantage of working for nearly a year in Kretschmer's clinic during the time when the latter was professor at Marburg. Later Kretschmer followed Gaupp, the grand old man of German psychiatry, in the professor's chair at Tübingen where he still presides. He is well known to American readers not only through the present textbook, but especially through his challenging *Körperban und Character* and his study of genius, *Geniale Menschen.*

The purpose Kretschmer had in writing the first edition of this work many years ago has been exemplified in all editions since. Medical students and practitioners needed an acquaintance with psychology not ordinarily provided in the medical curriculum, "not the old sort of philosophical conceptual psychology which possesses no sort of utilitarian value for the medical man," but rather "a psychology derived from and applicable to the science and practice of medicine," which should at the same time take sufficient account of broader biological and social relationships "to effect a satisfactory systhesis between the science of medicine and a true science of mind."

The plan of the book is based on the fact that "medical psychology can draw no hard and fast line between 'normal' psychology and psychopathology. The same primal mechanisms are constant and recurrent; on the one hand they crop up in dreams, the fantasies of artistic creation and folklore, and on the other in schizophrenia and neurosis. They are as adducible in animal and child psychology as they are in the psychopathology of hysteria and catatonia." Accordingly, to illustrate human psychic processes as completely as possible both normal and pathological cases are drawn upon.

Kretschmer's book does not claim to be a complete compendium for the training of a psychiatrist. It provides one aspect of such training—a fundamental and indisputable one—indicated by the title, a medical psychology reduced "to a few primal biological mechanisms [that] will help to make instruction in clinical psychiatry easier and more intelligible for the medical student." Such a medical psychology "should be entirely concrete and nonmetaphysical."

The insurmountable stumbling block in metaphys-

ical psychology is the nebulous concept of a soul. Kretschmer bypasses this stumbling block; the soul and the psyche are the same thing. He agrees with Democritus. Says Kreschmer: "By soul or psyche we mean that which we directly experience . . . all that is perceived, felt, imagined or willed. . . . The psyche is the universe of experience. . . ."

Another simplification deals with states of consciousness. Kretschmer replaces the "unconscious" of Freud by *die Sphäre* (literally "the sphere," for which the translator uses the Greek word "Sphaira"), thus avoiding the "verbal obliquity" of the former term which "has led to endless misunderstanding and controversy." Instead Kretschmer uses the analogy of the visual field; the "sphaira" represents the periphery of the field of consciousness, the border zone between consciousness and unconsciousness. Beyond lies unconsciousness, or better, extra-consciousness or nonconsciousness. The Freudian "unconscious" seems to postulate levels or depth of the psychic life beyond awareness. For Kretschmer "an 'unconscious psychic life' is a contradiction in terms." From either point of view an event may be either conscious or unconscious, or it may at one time be unconscious and at another conscious by the ordinary process of recall, however induced. In any case the Kretschmerian concept is clear enough and squares with common observation.

Keeping in mind the subjects of most importance for the physician the author dwells particularly upon the nature and treatment of the neuroses. "For is not the psychology of the neuroses essentially the psychology of the human heart in general, only in exaggerated relief? He who understands the neuroses understands human nature and therefore possesses the best of all equipments for the remaining psychological requirements of medical practice." Kretschmer has developed a plan of psychotherapy of his own. He follows no school but utilizes whatever procedure appears applicable to the individual case. "The supreme principle of psychotherapy is *nihil nocere*. He who never inflicts psychic injury on his patients is already a good psychotherapist." The author's practice is not only flexible and electric but all-inclusive, making use of every favorable agency and influence that may be brought to bear. Brief periods of treatment are preferable, usually 1 or 2 months, and re-education and training play an essential part.

Considerable new material has been introduced in the present edition of Kretschmer's book to take account of recent work, such as Hess' neurophysiological experiments with animals and Kleist's studies on the functional topography of the cerebrum and the frontal lobe syndromes. The number of editions through which the German text has passed is an index of its value and usefulness. The present English edition is timely and welcome.

C. B. F.

GESETZE UND SINN DES TRÄUMENS. By *Professor Dr. K. Leonhard.* (Stuttgart: Georg Thieme Verlag, 1951.)

It is Professor K. Leonhard's contention that dreaming is a function of the subconscious. He does not recognize nor treat of the Freudian Unconscious. The subconscious, according to Prof. Leonhard, supports the conscious in its mentation functions and is particularly concerned with those matters which the conscious in the waking state excluded from central awareness, or treated inadequately. Certain among these neglected matters are brought up again by the subconscious in the patterns of dreams. But the work of the subconscious, Prof. Leonhard maintains, is not confined to dreaming; on the contrary it operates constantly to maintain the soul in ordered agitation. *"Im Unterbewusstsein eine ständige Arbeit stattfindet, durch welche die Seele nach eigenartigen Gesetzen in Unruhe gehalten wird"* (pp. 137-138). The subconscious is the repository of man's precious lore (*Wissensschatz*). It is therein kept alive and available to the upper strata of consciousness. The dream affords the subconscious the opportunity to work through its problems (*Aufgabe*) free of the limitations of logical thought. The dream thus maintains and transmits man's treasured recollections (*Erinnerungsgutes*). What logical thought is to wakeful consciousness, the dream is to the subconscious (p. 143).

From this basic hypothesis, and by the evidence of numerous dreams, dreamt, recorded, and studied by the author, he derives what he terms the laws and the significance of dreaming—*Gesetze und Sinn des Träumens.* The subtitle includes a critique of dream interpretation and a glance or look (*Einblick*) into the operations of the subconscious.

This is the second, expanded, edition. The first carried the more modest title *The Laws of Normal Dreaming.* Professor Leonhard's criticism of dream interpretation is restricted to a denial of the validity of Freud's theory of repression as the *vis-a-tergo* of the dream: the denial of the existence of universal dream symbols; the denial of the existence of Jungian *Archetypen,* and the contention that patients dream in conformity with the school affiliations of their psychiatrists and, by virtue of the suggestive powers of theoretical formulations and expectations. *"Patienten der Freudschen Schule anders träumen als die Patienten der Jungschen Schule"* p. 3).

Professor Leonhard's work is astute, ingenious, informative and provocative. It is also extremely naïve, and in spots obtuse. The author gives many of his own dreams. Thereby he appears either as a bold or a rash man. In the end, however, one is forced to the conclusion that he is neither the one nor the other, but simply a man who, though knowing a great deal about dreams, really doesn't understand them. His psychology is the long-discredited associationalism. He believes that dreams are ultimately determined by physical states and sensations. Frustration dreams, characterized by an overwhelming sense of fatigue, and the inability to run, climb stairs, or to find one's goal, are due, according to Professor Leonhard, to the actual experienced sense of fatigue resulting from the previous day's physical strain. He reports the following dream (his own): "I am in an autobus, a corpulent woman presses against me more and more forcefully. I awake," he continues "and sense the pressure of the heavy bed

cover, just as I felt in the dream the pressure of the corpulent woman."

All that despite, Professor Leonhard's work commands earnest study. In significant ways it is informed, pertinent, and suggestive. Even his theories on the functions of the subconscious and the role therein of the dream, deficient as they appear to be, are not without much merit. They are an excellent antidote to the other extremes.

IAGO GALDSTON, M. D.,
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BESINNUNG UND BEWUSSTSEIN. (AWARENESS AND CONSCIOUSNESS). By *G. E. Störring*. (Stuttgart: Georg Thieme Verlag, 1953.)

It is very hard to give the English reader an idea of this small booklet (134 pages). The word "Besinnung" which the author opposed to consciousness is practically impossible to translate into English. It has too many meanings in German. For instance, it means awareness, it means rationality, it means recall, it means seriousness of mind. It is somehow the meaning of the Aristotelian "Nous." Maybe the best translation would be awareness. The meaning of "Besinnung" may be clarified by an example of the author's use of the term in this book. The baby is conscious, but has no "Besinnung," that is it is without evaluative awareness of its own mental processes. The author is of the opinion that the maturity of a human being consists especially in the development of the ability for "Besinnung" and "Selbstbesinnung."

The author started from the study of the "besonnene Dämmerzustande" (clouded state of epileptics). In this organic condition, the patient is conscious but he acts without "Besinnung." "Besinnung" is the highest function of the psychological aspect of a human being. He shows how this function develops in the life of a human being and how it is disturbed in different mental diseases especially in schizophrenia. If we cannot, or if we are prevented from using this function of "Besinnung" in dealing with important life problems, or in questions of evaluation, then 2 main dangers arise. The first, we lose our personality. We become without individuality. We are not a personality any more. We are part of the crowd. The second danger is that we get neurotic. He shows how modern psychotherapy, especially logotherapy of Frankl, uses "Besinnung" and "Selbstbesinnung" in spite of the fact that other words are used for these functions.

I suspect that American psychiatrists will not be very satisfied with this book. One reason is that it deals with cultural problems, problems of value, problems of responsibilities and dignities which the author uses to understand psychiatric problems.

The modern German philosophy of Husserl, of Scheler, Jaspers and Heidegger is quoted for the understanding of these problems. What happened in the world, and especially in the last 15 years in Germany, colored very much of this book. Questions which were very important for the German psychiatrists are sometimes not so important for American psychiatrists, and sometimes these questions cannot be even understood by an American psychiatrist, not even for one who was born in Vienna, lived there for more than 40 years, and worked in psychiatry for more than 15 years in the German cultural sphere. It is very interesting to see how this trend in modern German psychiatry developed, but to understand it fully, it would seem essential to have experienced intimately the Second World War, the Nazi regime, and post-bellum Germany.

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GENETICS AND DISEASE. By *Tage Kemp*. (Copenhagen: Ejnar Munksgaard, 1951. Price: 25 Dan. kr.)

The rapid development of human genetics, especially in the area of disease, makes this text a timely publication. Indeed medical genetics is now taking its place as one of the fundamental subjects of the medical sciences and physicians are constantly asking, "What can we read to keep abreast of developments?"

The fact that medical genetics is still in a pioneer stage makes it an interesting field of research and discovery, but also makes it a controversial one in many aspects. The general reader must keep this in mind and realize that the subject is far from being streamlined, while each specialist will find some points for disagreement. The mention of some such points in this review is not intended to detract from the general value of the text.

Few medical geneticists are as competent to prepare a text as Tage Kemp, Professor of Human Genetics, University of Copenhagen. His text is of reasonble length, some 300 pages, and divided into 5 parts.

Part I (comprising ⅓ of the text) discusses the basis of heredity, outlining what is meant by genes and chromosomes, dominance and recessivity, linkage and crossing-over, mutations, the effects of consanguineous marriages, sex determination, twinning, and so on. A point to be mentioned here concerns the discussion of the mutation rate for chondrodystrophy taken from Mørch's original work in which there is repeated an error in the method of calculation. This error has recently been pointed out by Robert Popham and earlier by J. B. S. Haldane.

Part II, in some 20 pages, outlines the special methods used in genetic studies on man, concerning probability, the study of human populations, statistic-genealogical methods, and the twin method. Concerning the twin method as here outlined, the reviewer would take issue, particularly with the statements that "if the disease is obviously hereditary and the gene presents a high frequency of manifestation, the disease *will always show concordance* in one-egg twins. If the development of the disease depends to some extent on environmental factors, we *may occasionally find discordance.*" These statements the reviewer feels are quite misleading.

Part III goes on to outline (in 50 pages) the in-

heritance of normal characters, particularly the inheritance of blood groups. A small point may here be mentioned concerning the foetal development of the dermal configurations. The text states that "*towards the end of foetal life* the system is fully developed." It is generally accepted that the finger, palm, and sole ridges are completed much earlier, namely, by the end of the fourth foetal month and hence are important recorders of early disturbance of foetal growth.

Part IV (⅓ of the book) deals with hereditary diseases, giving 2 chapters to a discussion of nervous and mental diseases. Part V is a brief concluding discussion of Genetic Hygiene.

Genetics and Disease is a text which the reviewer keeps constantly at hand for reference. The subject is still too new for general agreement, but Tage Kemp gives on the whole an excellent statement. It is a text that should be readily available for medical students and practitioners. A strong point in favor of this book is its emphasis on fundamental principles rather than being a mere collection of factual detail.

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GROUP TREATMENT IN PSYCHOTHERAPY: A REPORT OF EXPERIENCE. By *Robert G. Hinckley, M. D.* and *Lydia Hermann, M. S.* (Minneapolis: University of Minnesota Press, 1951. Price: $3.00.)

As a "report of experience" with one particular type of group psychotherapy this is an excellent book. It is based upon the work of the mental hygiene clinic of the student health service at the University of Minnesota. The total experience covers 11 years, but the greatest emphasis was, as might be expected, during the 3 years prior to the writing of this report—a period during which 27 groups were formed.

The book offers a great deal to anyone seriously interested in group psychotherapy, who has a reasonably comprehensive background in individual therapy. There are excellent, though short, analyses of the functions of the group and of the therapist, of group dynamics and of functional mechanics. Verbatim excerpts from the records of group sessions are liberally used, and these with their interpretive notes clarify the picture of proper and improper procedure.

It is to be hoped that everyone who is suddenly taken with the idea of group therapy as a solution for the problem of spreading "psychiatric time" (which it most certainly is not) will read this book before embarking on therapy with a group. The authors very clearly bring out a number of important points about the issues involved, without going into explicit detail. Nevertheless, 2 important points are emphasized, namely, that not every therapist can do or should attempt to do group therapy; and that patients must be carefully selected.

As an introduction to one type of group psychotherapy (verbal, for adolescent or adult groups), the book is highly recommended. It is not comprehensive enough to do more than serve as an introduction for this one type. It is unfortunate that a more complete bibliography is not given, so that beginning workers could follow up on other types of psychotherapy in groups.

L. G. L.

CURRENT THERAPY—1953. Edited by *Howard F. Conn, M. D.* Philadelphia: Saunders, 1953. Price: $11.00.)

This book represents a tremendous undertaking on the part of its editor and his dozen consultants. Some deficiencies of previous volumes have been largely made good. The invariable sketchiness, lack of clarity, and precise direction with consequent ambiquity have been nearly eliminated. A particularly good feature is the inclusion of more than one authority on the common important disorders or diseases and on the whole the articles have obviously been written with great care by experienced people.

The editors in planning this book had to decide whether to make the book conveniently small and therefore inevitably unsatisfactory or to make it really comprehensive, large, and unwieldy. They have chosen the huge and bulky method, and that was undoubtedly the right decision. It cannot be read in bed with comfort. There are no important omissions from the long list of conditions presented to the practicing doctor. In the section on allergic diseases, more emphasis perhaps should be placed on the treatment of the patient himself. In some, this is, of course, mentioned, but sufficient stress is not laid on this side of therapy and of the understanding of the state of the organism as a whole and the perspective with which all sorts of procedures such as desentization, insulation, and even isolation have to be viewed. There is an interesting list of drugs at the end of the book which reveals how industrialized pharmaceuticals have become because of their complicated chemical formulae, so that now the firms who make them have invented thousands of new names which often give no hint of their ingredients.

There is also a useful page or two of weights and measures and tables showing how to make solutions of various percentages.

The editors and publisher are to be congratulated on the success of their efforts.

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SOCIAL SCIENCE AND PSYCHOTHERAPY FOR CHILDREN. By *Otto Pollak and Collaborators.* (New York: Russell Sage Foundation, 1952. Price: $3.00.)

This book is the report of a research project that involved Russell Sage Foundation as inaugurator, Otto Pollak, teacher of social science at the University of Pennsylvania, and members of the staff of the New York City Jewish Board of Guardians. The task of the project is formulated in the first sentence, as follows: "exploration into the question of whether existing funds of social science knowledge can be adapted to psychotherapy practised in a

child guidance setting." This would indeed have been a big order, and if properly executed, of greatest importance.

In the introduction we become aware of the fact that the Jewish Board of Guardians is an agency strictly directed by Freudian concepts and by the psychoanalytic philosophy which has filtered into the field of child guidance. Even the table of contents reveals that topics have been considered from the viewpoint of psychoanalytic concepts and that some aspects that one would expect in a "sociology of child guidance" have been omitted.

The first chapter, "Concepts of Family Orientation in Diagnosis and Therapy," written (like all the others) by Dr. Pollak and a member of the staff of the Jewish Board of Guardians, describes the strange routine patterns of their work with regard to family relations. We quote: "According to current practise in the child guidance clinic of the Jewish Board of Guardians, the main source for diagnostic information in addition to the child himself is his mother. She is the person from whom the basic data about the child's symptom picture, his developmental history, and his family background are gathered. Routinely the child is seen for diagnostic observation after his mother and on the basis of the material condensed from these two sources in interviews covering an intake period of about six weeks. . . . Only in a minority of cases is the child's father also seen as a part of the initial diagnostic contact. When this happens, the reason usually is that he has taken the initiative in the referral stage. In such cases both parents may be invited to the intake interview, but sometimes even though the father is the parent who has approached the agency, only the mother is asked to the initial interview regarding the child's difficulties. . . . Similarly it is basically only the mother who is regarded as a potential patient besides the child, although as treatment progresses the father may also be seen for therapy. In such cases it is usually a request on the part of the mother that brings about the contact between the worker and the father. It may be due to the initiative taken by the father himself. It hardly ever occurs as a consequence of initiative taken by the workers." This sounds like an acceptance of the matriarchal family setting. It is usually thought that here in America we are working towards a family situation of equal parental responsibility. Theoretically such an emphasis on the relationship between the mother and the child highlights the concept of the Oedipus complex.

Unbiased study of cases as they come into the child-family advisory agency will show that in 50% of the cases the father will be the member of the family to independently make the first contact, give the more essential information, and give a greater volume of information. If we are not unreasonably dogmatic and routinized we must aim in all cases at getting the most complete information about the pathogenesis of the child's case, and therefore whichever parent can present that information will be important. The same too, can be said for the problem of therapy. Whichever parent needs therapy, or whichever parent can be most influential in the recovery of the child should be treated in whatever way possible for the best results.

This bias persists in the rest of the book so that it becomes merely propaganda for an organized point of view that is extremely superficial. Anyone who has any real insight into the problems of child guidance cannot but feel that Dr. Pollak's contribution does not present anything new.

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OPIATE ADDICTION. By *A. Wikler*. (Springfield: C. C. Thomas, 1952.)

This book contains valuable new information concerning opiate and other addictions. In contrast to much that has been written on opiate addiction from clinical impressions only, Dr. Wikler's opinions are based on very careful research on human volunteers. The chapter on methodology should be studied by any group undertaking clinical research into addictions. A much clearer explanation of the nature of the opiate addiction process has resulted from his investigations. Some of his impressions are quite original and interesting, e.g. that the withdrawal reaction to morphine could return as a conditioned response to available supply without any administration of morphine. If the author is able to verify this, it will provide a new understanding of the relapses of the opiate addict.

One of the most helpful chapters for the practising physician compares opiate and barbiturate addiction. Barbiturate addiction is more likely to be encountered in psychiatry or general practice than opiate addiction. It also appears that physicians are more frequently responsible for initiating and maintaining barbiturate addiction. Dr. Wikler's comparison of the 2 addictions should do much to dispel present misunderstanding of the hazards involved in prescribing barbiturates for prolonged periods.

This book should be carefully studied by all clinicians who are concerned with opiate, barbiturate, or alcohol addiction. The basic differences in the reasons for using opiates vs. barbiturates or alcohol are well explained. The book itself has only 60 pages and can be easily read in an evening. The references alone would make it a valuable addition to any medical library.

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Shadow Brook Health Foundation,
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